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THE
LONDON MEDICAL REVIEW
AND
MAGAZINE;

BY A
SOCIETY OF PHYSICIANS AND SURGEONS.

VOLUME THE FIFTH:
INCLUDING FOUR MONTHLY NUMBERS,
FROM NOVEMBER 1800 TO FEBRUARY 1801.

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FIVE VOLUMES, in Boards, Two GUINEAS.



PREFACE

TO THE

FIFTH VOLUME.

IN looking over the present volume, our readers will observe a considerable increase in the number, and, we trust, in the value, of communications from our correspondents. Among these, the account of the exsection of the uterus, translated by Dr. Hooper, from Professor Wrisberg's Commentaries, will be considered as extremely interesting. We had given an account of the successful performance of that operation by Mr. Hunter, in our Review for April 1800, p. 139, tending to shew that the wound of the uterus, in performing the Cæsarean section, should not be esteemed as the sole cause of the almost uniform fatality of that operation: but the present case still more strongly confirms that position, as we find a woman recover, though the exsection had been performed in the rudest and most inartificial manner. The account of the efficacy of digitalis in consumption, from Salmon, and that of catarrh being as often occasioned by removing suddenly from a cold to a heated room, as from a hot to a cold temperature, from Sauvages, (given under the signature of BOOKWORM,) with the remark, that if men would read more they would discover less, are evidently fruits of just discrimination; and we hope to receive more observations from that quarter. Mr. Blair's communication from the "*Currus triumphalis è Terebintho*," shewing that the method of amputating with a flap, and of healing by the first intention, which are thought to be more recent discoveries, were practised above an hundred and twenty years ago, is of the same kind, and merits our thanks.

The further communications, in a similar way, which he promises to contribute, will be received by our readers, we doubt not, with pleasure. The letters of Sir Christopher Pegge, &c. tending to establish Dr. Jenner's opinion, that the cow-pox originates from the matter of the grease in the horse, are curious and important; and the several observations of Dr. Marshall, Mr. Pears, and Mr. Harrup, on the cow-pox, will assist in completing the history of that disease.

The observations of Dr. Domeier on the cause of putrefaction in dead bodies, and on the treatment of fever; of Mr. Harrup on the effects of light upon mercurial oxyds, and on vegetables; of M. Grille on oxygen; of Dr. Moffat on the effects of phosphorus in the cure of malignant fever; of Mr. Stuetz on the cure of tetanus traumaticus; and of Dr. White on the effect of cancerous virus; contain together much interesting matter.

In our former volume we gave an account of Dr. Gregory's Memorial to the Managers of the Edinburgh Infirmary, which, not being in general circulation, must have been acceptable: we have here noticed four answers to the Memorial; our readers will therefore have the whole subject of the dispute relative to the management of the Royal Infirmary before them. Lastly, we have been able, in the concluding Number of this volume, to furnish our readers with a correct copy of the Charter granted to the College of Surgeons in London; which is not yet, we believe, delivered to the members. From this brief view of the contents, chiefly of one department of our miscellany, our readers may at the least collect that no small share of industry has been exerted in procuring materials for their entertainment. The same zeal and assiduity which we promise to continue, will, we trust, have the effect of inducing our correspondents to transmit their future favours, and of exciting others to contribute to a fund which is solely employed to the advantage of the public.

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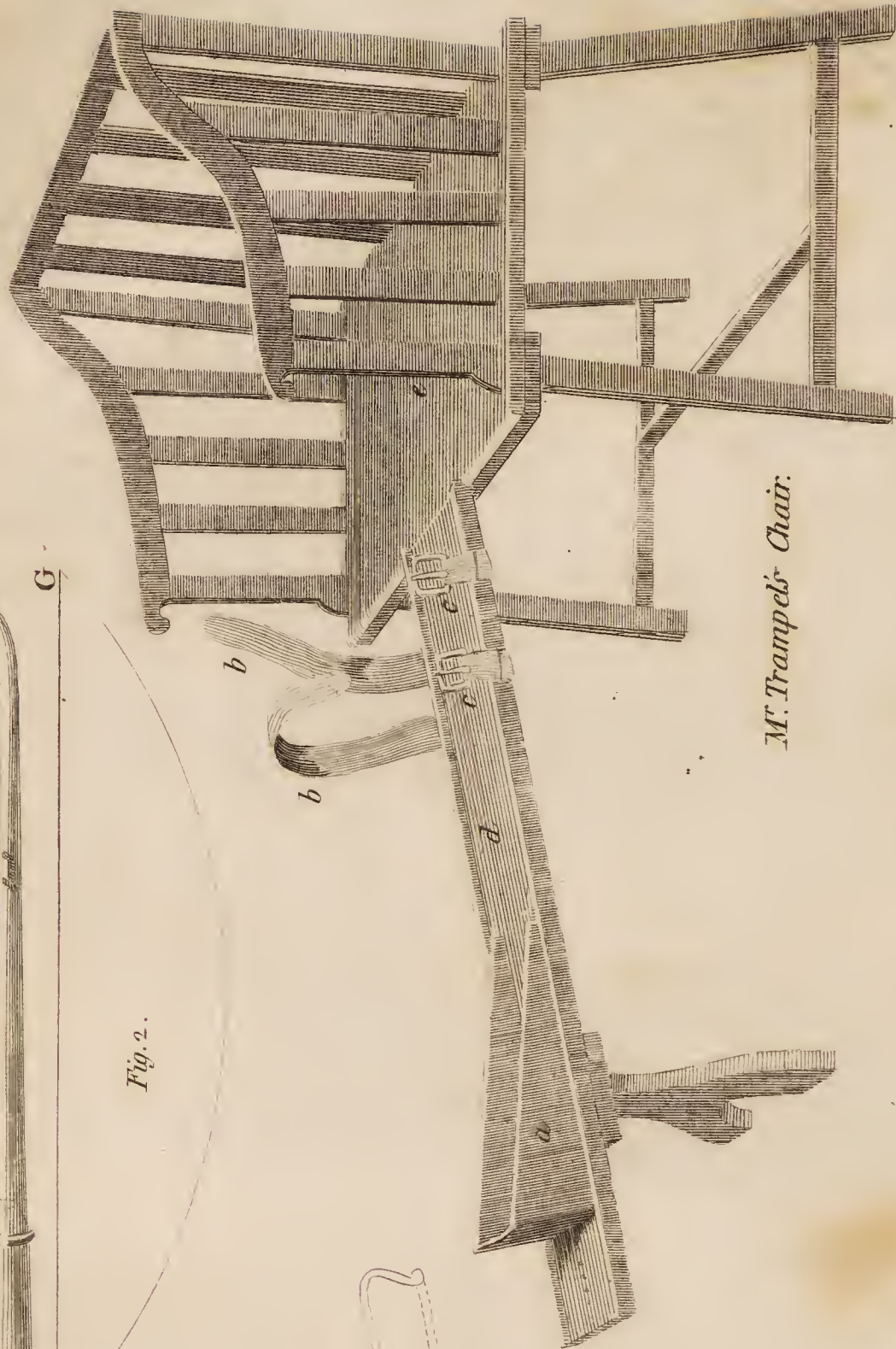
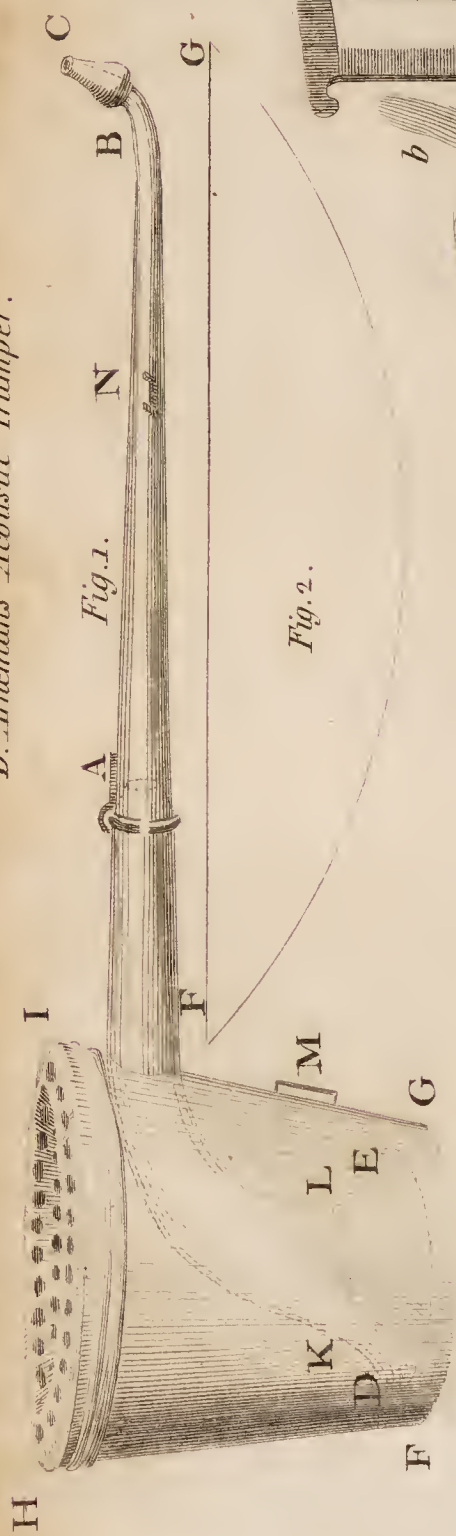
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* * Communications are received for the Editors by Mr. BLAIR,
No. 69 Great Russel Street, Bloomsbury.

Dr. Arnemann's Acoustic Trumpet.



M. Trampel's Chair.

THE
LONDON MEDICAL REVIEW
AND
MAGAZINE.

VOL. V. N^o XXI. NOVEMBER MDCCC.

ANALYSIS OF BOOKS.

ART. I. *Nordisches Archiv, &c. i. e. Northern Records of medical and physical Science.* Edited by Prof. PFAFF, of Kiel, and Dr. SCHEEL, of Copenhagen. Vol. I. N^o I. and II. Octavo. Imported by GEISWEILER. 1800.

IN pursuance of our design, to notice the most respectable journals on medicine and surgery which are published on the continent, we now shall give an account of a periodical work conducted by two celebrated practitioners in the North. The First Number of this repository, printed in 1799, contains several original papers:

I. Experiments on respiration and its use, by Prof. Abilgaard, with Remarks by Prof. Pfaff.—The results of these experiments are inconsistent with the generally received doctrine of respiration; for M. Abilgaard attempts to prove (*See our last Number, p. 404,*) that very little air, if any at all, enters

into the lungs during inspiration : against this writer, however, Prof. Pfaff supports the old opinion. 2. The dissection of a drowned horse, by J. Kuhn, with some physiological remarks of Mess. Herholdt and Rafn. The subject of this paper is chiefly the air-bladders found in large drowned animals. 3. Experiments on Galvanism, which are contributions to Dr. Humboldt's work on the same topic. 4. Contributions to the history of larvated and contagious intermittent fevers. 5. On small-pox inoculation, by Prof. Pfaff, comprehending some observations made in inoculating a great number of children in several villages at once. 6. Description of a hooked forceps, and a perforator, with a sheath, by Dr. Scheel. 7. Reports and extracts from letters, including a short account of the mineral waters of Sweden, by Hedin, &c. 8. Literature of Northern medicine and natural history; being a review of some dissertations from Kiel and Copenhagen, and of several pamphlets describing a dysentery which prevailed in the neighbourhood of Kiel.

The greater part of the Second Number of this publication is occupied by Seven Essays ; the first of which is on

The most advantageous Method of obtaining phosphoric Acid, by Mr. SUERSEN, Apothecary at Kiel ; and, on account of its utility to the practical chemist, we shall translate it entirely.

“ As the phosphoric acid has for some time past been introduced into the practice of medicine, and the most beneficial effects have resulted from its exhibition, both external and internal, so that every medicinal warehouse ought to be provided with a sufficient stock of this article ; it may not be thought altogether superfluous, if I endeavour to turn the attention of the profession to the most advantageous method of obtaining it.

“ It appears to me to be a matter of great consequence, that this acid should be kept by the apothecaries in its purest state, in order that the medicinal properties peculiar to this new remedy may be ascertained with all possible precision, and
accurately

accurately distinguished from those belonging to the sulphuric acid.

“ We are certainly in no want of directions for obtaining the phosphoric acid ; nor can it here be my intention to point out to the chemist an improved method of preparing it, as he must already be sufficiently acquainted with the means requisite for that purpose : nevertheless, I think it may be of some service to my professional colleagues, if I submit to their examination a method, which, should they approve of it, they may likewise put in practice, whereby I have of late been enabled to procure, in the space of a few hours, as large a quantity of pure and concentrated phosphoric acid, as I could formerly scarce prepare in a week, or even a fortnight, and that not without a great deal of labour and expense.

“ The method of preparing phosphoric acid hitherto most generally employed, consists in separating it, according to the directions of the celebrated Scheele, or Nicholas, from the bones of animals—a method, which we find sufficiently described in every treatise of chemistry.

“ But although this method of preparing the acid is very easily described, and appears extremely plausible, yet every one who attempts to put it in practice, especially if he has to operate upon larger quantities of materials than are sufficient for chemical experiments, will soon find it to be attended with many difficult and vexatious circumstances, and that the completion of the process is impeded by a variety of obstacles.

“ Most of all, however, the pharmaceutical operator, who has not a complete and properly arranged apparatus for this process, frequently finds himself much at a loss in attempting to perform it. Sometimes his labour is procrastinated for want of the proper vessels ; sometimes the acid which he obtains is vitiated by an admixture of foreign matters ; and even when, after a long trial of his patience, he has succeeded in separating the volatile alkali and sulphuric acid from the product of the bones, he must still be uncertain, if he has

made use of porcelain vessels, whether the acid is not in some degree vitiated by particles derived from the substance of the vessels. He cannot even ascertain with precision when the last sulphuric vapours shall be disengaged ; so that a considerable quantity of phosphoric acid may be wasted by keeping up the heat for too great a length of time ; besides that the longer the heat is continued, the greater will be the danger of the acid becoming mixed with earthy particles. He even runs the risk of being entirely disappointed of the fruits of his labour ; for even the best porcelain vessels are frequently cracked by the heat to which they must be exposed, as I have had occasion to know to my cost.

“ The tediousness of this operation, and the very considerable expense with which it is attended, oblige the apothecary who wishes to procure several pounds of phosphoric acid in a short time, to relinquish the attempt of decomposing bones, and to endeavour to oxygenate ready-prepared phosphorus.

“ Here he has his choice of three methods by which phosphoric acid may be obtained ; namely, the combustion of phosphorus, its gradual oxygenation by exposure to the air, and, finally, its treatment with nitric acid.

“ The first method of obtaining this acid, by the combustion of phosphorus in a proper apparatus, has been recommended by the late M. Pelletier, (*Rozier's Journal de Physique*, Jul. 1785, p. 50,) and Professor Tromsdorf, (*Journal der Pharmacie*, vol. i. p. 952,) and is certainly a very good way of obtaining phosphorus in a state of considerable purity. This mode, however, could not be conveniently practised by every apothecary, since, according to Pelletier, it requires a very complicated apparatus, besides that the combustion of phosphorus would be ill adapted for the speedy preparation of large quantities of the acid ; so that, upon the whole, it cannot be recommended as a method to be universally adopted by all apothecaries.

“ The second mode, the slow spontaneous oxygenation of
the

the phosphorus, costs the apothecary indeed very little trouble—not more than that of frequently examining the temperature of the place in which the phosphorus was left to liquefy. It is, however, necessary that he should use the precaution, not to expose too large quantities of phosphorus to be oxygenated at once, nor to suffer the pieces of phosphorus to come into contact with each other; as it has happened to me more than once, that an ounce of phosphorus, which I had placed, in a funnel of glass, in a cellar, took fire at the temperature of 50° Fahr. The phosphorous acid thus obtained, may afterwards be converted into phosphoric acid by distillation, according to the method of M. Buchholtz (*Beytraege zur Erweiterung u. Berichtigung der Chemie*, p. 69, seq.)

“ Though phosphoric acid may thus be obtained in a very pure and concentrated state, this method is, nevertheless, in my opinion, not calculated to become a general rule of practice; for it requires still more time than the combustion of the phosphorus; neither does it help the apothecary, who may be under the necessity of procuring presently a considerable quantity of the acid, out of his dilemma—even placing the danger of spontaneous inflammation out of the question.

“ The preparation of this acid by means of the nitric acid seems therefore to be the only alternative that is left; and to this method, in my opinion, the apothecary should alone have recourse. It procures him what he wants with certainty, without much expense, without any hazard of loss, with scarce any trouble, and in a very short space of time.

“ Though the ingenious Prof. Tromsdorf supposes the oxygenation of phosphorus, by means of the nitric acid, to require that the operator should use the utmost caution, as in some respects may indeed be the case; yet his assertion is not to be understood without limitation, and all depends here upon the manner in which we operate with the phosphorus and the nitric acid.

“ If,

“ If, for example, we pour nitric acid, highly concentrated, upon a considerable quantity of phosphorus, and this mixture be afterwards exposed to a violent degree of heat in the sand bath, an inflammation of the phosphorus is very likely to happen: nay, it will almost unavoidably take place; as the action of the large mass of phosphorus upon the nitric acid is too vehement, and a considerable part of the former is thereby impelled towards the surface, where it comes into contact with the atmospherical air and catches fire, in consequence of which, such a rapid extrication of heat and air is produced, as violently to break in pieces the vessels in which the distillation is performed.

“ The same circumstance will likewise happen, if, according to the directions of Hermbstædt (*Experiment. Pharm.* vol. xxi. p. 54,) we pour four ounces of fuming nitrous acid, diluted with eighteen ounces of water, into a retort, upon one ounce of phosphorus, and distil this mixture in the sand bath. At first, no action of the phosphorus upon the acid is perceptible; but in the progress of the distillation, as the nitrous acid becomes more and more concentrated, its action is so instantaneous as to impel the phosphorus with violence to the surface, where it immediately takes fire, and the loss of the retort, with all its contents, is the inevitable consequence.

“ As, therefore, it is extremely difficult to obtain phosphoric acid in this manner, and, in general, to perform the operation by means of the sand bath, it will be the best to follow Lavoisier's method; namely, to pour the nitrous acid into a tubulated retort, and gradually to introduce the phosphorus by single drachms at a time.

“ By following this method, with some variation, we may prepare a considerable quantity of phosphoric acid, with the utmost security, and with very little expense of time. We may even carry on the process in the intervals of the time employed upon other operations.

“ After having procured some pounds of concentrated
I nitric

nitric acid, free from all admixture of sulphuric, by drawing off separately the acid which passes over in the middle of the distillation, we dilute several ounces of this acid with an equal quantity of distilled water. This diluted acid we pour into several small glass receivers, an ounce into each, which are placed upon a frame made of iron wire.

“ Half an ounce of phosphorus is now introduced into each of these receivers, which are gradually heated by the flame of a small lamp, till a sufficient action of the phosphorus upon the nitrous acid is perceived. A considerable extrication of nitrous gas immediately takes place, which, however, is not so violent as to impel the phosphorus to the surface of the liquid. If, in any of the receivers, the solution of the phosphorus does not seem to go on as it ought, these are heated by applying the lamp to them; and after some time, if we have reason to apprehend that too great a degree of heat might be produced, the lamp is entirely removed.

“ Should the action in the receivers become very violent, and luminous vapours disengage themselves, we may immediately allay it by adding a small quantity of distilled water.

“ Thus we continue to introduce the phosphorus into the acid by small quantities at a time, alternately heating the receivers with the lamp, till the reciprocal action of the acid and the phosphorus becomes languid, when a fresh quantity of concentrated nitric acid is again added. This alternate introduction of the phosphorus, the nitric acid, and the distilled water, with the application of the lamp wherever it is required, are continued till the whole quantity of phosphorus which we wish to oxygenate has been expended.

“ For the complete oxygenation of an ounce of phosphorus, four ounces of fuming nitrous acid, of 1,508 specific weight, are generally required, in a temperature of 61° Fahr. and a space of four hours.

“ In six small receivers, and with one lamp, we may very conveniently

conveniently oxygenate twelve ounces of phosphorus in a day, reckoning eight hours to the operation. This phosphoric acid, which is of a dilute quality, and mixed with a small quantity of muriatic and nitric acid, is now subjected to a second distillation upon the sand bath, in which, at first, muriatic acid gas, then nitrous acid and nitrous gas, and after that an insipid water, passes out.

“ If we now continue the distillation, with an augmentation of temperature, an acidulous fluid passes over, while pungent vapours are extricated. These vapours have an odour precisely similar to that of the phosphoric acid, when passing into a state of volatilization.

“ The acid which passes over at the beginning of the distillation produces no cloud when mixed with lime-water; that, on the contrary, which is given out at the end of the operation, precipitates from it a very copious sediment; a proof that the acid which is last extricated is of a phosphoric nature; and it appears as if by a very great increase of temperature a partial decomposition of the phosphoric acid is effected, as Prof. Scherer seems also inclined to believe. (See Tromsdorf's *Journal der Pharmacie*, vol. iii.)

“ The whole process being now completed, we have a colourless phosphoric acid, of the consistence of a thick syrup, the specific weight of which is 2,0 at the above-mentioned temperature.

“ By this method we obtain from one ounce of phosphorus, $2\frac{1}{2}$ ounces of concentrated phosphoric acid, soluble in water with an extrication of heat, and possessing all the properties of a chemically pure phosphoric acid.

“ As phosphorus may be bought at Frankfort for a rixdollar (3s. 4d.) per ounce, and as in the method just described an unnecessary waste of time, coals, and volatile alkali, is avoided—a saving which bears no comparison with the price of the nitrous acid employed—and as, moreover, the operation is not attended with the smallest danger; I think I may safely recommend

recommend this method to be adopted by all persons employed in the oxygenation of phosphorus."

2. *Additions to the late Experiments on the Uses of Respiration.*

By Prof. ABILGAARD.

This article is connected with the essay, on the same subject, which appeared in the preceding number, and was chiefly intended to prove, that in respiration, the effect of the air is either *something less*, or *something more*, than the oxygenation of the blood. The author, who labours under a mal-conformation of the thorax, asserts that the average quantity of air which he draws in at a single inspiration amounts to not more than three cubic inches. Of so small a quantity, he says, hardly any can penetrate into the air-cells of the lungs; should it not therefore, he asks, be possible for those in whom the thorax is formed like his own, to live without oxygen? or may not the use of respiration in such be merely the constant renovation of the contents of the trachea? Where the thorax is well formed, he allows the quantity of air inspired at once to be from twenty-five to twenty-nine cubic inches; but he doubts the accuracy of Dr. Menzie's experiments, in which forty cubic inches was the average result. If the air that is inspired, penetrated directly into the cells of the lungs, they must soon become choked up by the dust and filth, with which the atmosphere, particularly of populous towns, is constantly impregnated. The author says he has found by repeated experiments, that a given quantity of air supports life longer, if drawn in by short and quick inspirations, than if by fuller and less frequent ones. In phthisis pulmonalis, when sometimes hardly one tenth of the air-cells are fit for the purposes of respiration, life is often protracted to a very considerable length, though the quantity of air that can act upon the circulating mass must be extremely small. In birds, though respiration and oxygenation be more necessary to them than to any other class of animals, the lungs are much smaller in proportion than in the *mammalia*. Finally, were the oxy-

generation of the blood the whole aim of nature in the function of respiration, the organs by which it is carried on, would be very ill calculated for their purpose; since, even admitting a large quantity of air to enter the lungs at each inspiration, the portion contained deep in the thorax could be but very slowly and gradually renovated, whilst that contained in the trachea is renewed at each inspiration. The author concludes with proposing the question, Whether electricity, Galvanism, or some other imponderable substance, may not be communicated to the system by means of respiration, and contribute to the support of animal life?

3. *Contribution towards a History of the Discovery of the Liquor Amnii in the Trachea of the Fœtus.* By J. D. HERHOLDT, Surgeon at Copenhagen.

Hippocrates, or whoever else may have been the author of the treatise *De Naturâ Pueri et Princip.* asserted that the fœtus respire in the uterus. This assertion was afterwards combated by various arguments, which Charleton quotes in his *Exercitat. med. Cap. de Respiratione.* *Hagæ Comitum* 1681. In the time of *Harvey*, the most general opinion amongst physicians was, that the fœtus in utero did not respire, as is implied by his asking, “How comes it to pass that the infant cannot live a single hour after birth without respiring, though the fœtus in utero remains nine months in good health without the aid of respiration?” Almost all the physiologists, who attempted to solve this problem, took it for granted that the fœtus in utero does not exercise the function of respiration. The notion that the *liquor amnii* did not enter the trachea of the infant was also pretty generally prevalent in the days of *Harvey*, and various unfounded hypotheses were adopted, to explain the manner in which nature, as it was supposed, provided against such an accident. Nevertheless these speculations contributed to lead physiologists nearer to the knowledge of the real cause why the fœtus in utero does not respire. *Swammerdam* says (in *Tract. phys. anat. med. de Respiratione*

Usuque

Usuque Pulmonum, in Mangeti Bibl. anat. P. II. p. 986 :) “ In the living foetus, that is not yet ripe for birth, the lungs cannot be expanded, and consequently no respiration can take place, on account of *the water which occupies the cavity of the thorax, and the debility of the muscles.*” At length it was attempted to investigate the functions of the placenta, which furnished a satisfactory explanation of the means by which the life of the foetus is preserved without respiration. Amongst all the older writers, *J. Tabor* seems to have possessed the most accurate ideas on this subject. The following passage is extracted from his *Exerc. med. Lond. 1710. Cap. III. p. 229 :* “ Though the foetus in utero does not respire, it is nevertheless supplied with air; for during the whole period of gestation, air is imparted to its blood from the maternal blood, which is carried by the arteries to the uterus. But should this function be interrupted, the non-respiring foetus must die: not so much on account of a stoppage of its circulation, proceeding from a cessation of that impulse (*a cessante illo momento*) which it derived from the maternal blood, as from a want of that renovation in the circulating mass, which it receives from the blood carried from the lungs of the respiring mother, through the heart and arteries, into the placenta, and from thence, through the umbilical vessels, into the foetus. The blood, impregnated with air in the lungs of the mother, and afterwards mixed with the blood of the foetus, is sufficient for the muscular motions which the foetus performs. As these motions are few and weak, it requires less air to enable it to perform them than is necessary after birth, and consequently that which it receives from the maternal blood is sufficient whilst it remains in utero. The motions necessary to the life of the foetus in utero are those of the heart and vessels; when, therefore, the circulation from the mother into the foetus ceases, it can still live without respiring, till the air contained in its blood (which it received from the mother) has become so saturated as to be no longer fit for sup-
porting

porting the motions of the heart. But when it has reached this point of saturation, the motion of the heart ceases, and the foetus dies." It is evident, that this ingenious author wanted nothing more than the term of *oxygen*, in order to have exhibited Girtanner's theory of the use of the placenta, and that of Goodwyn concerning apparent death from suffocation. The succeeding writers, however, did not adopt the rational theory of Tabor. In general, they were either of opinion, that the foetus actually exercised the function of respiration, or else supposed the trachea to be, if not imperforate throughout its whole extent, at least closed at its upper extremity. Very few of those who denied the respiration of the foetus mentioned the presence of the liquor amnii in the trachea. Røederer indeed expressly notices it; but it is not quite clear whether he considered it as a natural, or as a morbid circumstance. An anonymous writer, who is called Mr. V. (probably Vitet,) is the only one I meet with, who has given an accurate idea of the state of the trachea in the foetus. "As we know," he says, "from ocular demonstration, that the liquor amnii enters the pulmonary vessels of the foetus, we are also authorized to conclude, that water, or any other liquid, may enter the pulmonary vessels after birth, *without the aid of respiration*." (Vid. Champeaux and Faissolle's Facts and Observations on the Cause of Death in drowned Persons.) This opinion, however, was combated upon various grounds, which it would be too tedious to enumerate.

We may class all the different opinions that have been advanced relative to this subject, under the following heads. It was maintained,

1. That the upper part of the uterus is filled with air, and that the foetus is placed in a sitting posture, with its face raised above the *liquor amnii*, in order that it may be able to respire this enclosed air;

2. That the foetus inspires the liquor amnii itself, and that consequently its trachea is filled with this fluid;

3. That

3. That the fœtus does not respire, nor can its trachea bear the admission of the liquor amnii; on which account this canal is either closed at its upper extremity, or its cavity obliterated by pressure, contraction, or the introsusception of the cartilages;

4. That the fœtus does not respire, and that its trachea is filled up with mucus;

5. That the fœtus does not respire, but that the trachea nevertheless admits the liquor amnii into all its open ramifications.

Thus the controversy turned upon two principal propositions, viz. 1. *That the fœtus respire*; 2. *That it does not respire*. Both these propositions are in part true and in part false. The assertion, that the fœtus respire, supposes the pulmonary tube to be filled, and is so far consonant with nature; but it is false inasmuch as by respiration we understand those motions of the lungs whereby the medium in which the animal lives is alternately received into and expelled from them; for this function is not exercised till after birth. The second proposition, *That the fœtus does not respire*, is perfectly conformable to the laws of organic nature. It is only necessary that we should by no means suppose the non-respiration of the fœtus to imply that the liquor amnii does not enter into the lungs. For here that general axiom in hydraulics applies—that every fluid which surrounds a solid body penetrates into all the open and empty cavities of that body. No organic power, therefore, nor any respiratory action, is required in order to fill the trachea of the fœtus with the liquor amnii.

The remaining part of this paper refers to a controversy, carried on in some foreign journals, concerning the manner in which the lungs are freed from the liquor amnii, either at or after birth; but as the works to which the author constantly alludes, are probably not in the hands of the English reader, it would be useless to take any farther notice of what he here advances on this subject.

(To be continued.)

ART.

ART. II. *Researches, chemical and philosophical; chiefly concerning nitrous Oxide, or dephlogisticated nitrous Air, and its Respiration.* By HUMPHRY DAVY, Superintendent of the Medical Pneumatic Institution. Octavo. 580 pages. JOHNSON, London. 1800. Price 10s. 6d.

THE author has here laid before the public a very elaborate and minute investigation concerning the composition, properties, combinations, and effects of the nitrous oxide, (or the dephlogisticated nitrous gas of Dr. Priestley,) an account of the discovery of which was briefly given by Dr. Beddoes in his "Notice of some Observations made at the Medical Pneumatic Institution." (See our Ninth Number, p. 233, for November 1799.)

The *first research* chiefly relates to the production of nitrous oxide, and the analysis of nitrous gas and nitrous acid. Although, in this inquiry, but little can be properly called the author's own, he has repeated and varied the experiments of his cotemporaries so as to afford some very different and interesting results.

In the *second research* the combinations and composition of nitrous oxide are investigated, and an account is given of its decomposition by most of the combustible bodies.

The *third research* contains observations on the action of nitrous oxide upon animals, and an investigation of the changes effected in it by respiration.

In the *fourth research* the history of the respirability and extraordinary effects of nitrous oxide is given, with details of experiments on its powers made by different individuals.

A satisfactory analysis of the author's ingenious experiments and observations cannot be presented to our readers in so narrow a compass as our limits allow. To be fully understood, they must be perused and examined in detail: but we shall endeavour to exhibit the substance of Mr. Davy's practical remarks and conclusions, from which no small degree of

amusement and instruction may be derived. However, in order to give a general idea of the previous steps by which the author arrived at his leading truths, we here subjoin a sketch of the heads or sections into which the first and second researches are distributed.

RESEARCH I. *Into the Analysis of Nitric Acid and Nitrous Gas, and the Production of Nitrous Oxide.*

DIVISION I. *Experiments and Observations on the Composition of Nitric Acid, and on its Combinations with Water and Nitrous Gas.*

1. Preliminaries—2. Production of aëriform Nitrous Acid—3. Specific Gravity of Gases—4. Experiment on the Formation of Nitrous Acid—5. Conclusions—6. Experiments on the Combination of Nitrous Gas with Nitric Acid—7. Additional Experiments—8. Conclusions—9. Mr. Thomson's Theory of the Difference between Nitric and Nitrous Acid—10. Composition of the different Nitrous Acids—11. Combination of Nitric Acid with Water—12. Of Nitrous Vapour—13. Comparison of the Results with those of Cavendish and Lavoisier.

DIVISION II. *Experiments and Observations on the Composition of Ammoniac, and on its Combinations with Water and Nitric Acid.*

1. Analysis of Ammoniac—2. Specific Gravity of Ammoniac—3. Of the Quantities of true Ammoniac in ammoniacal Solutions—4. Composition of Nitrate of Ammoniac—5. Decomposition of Carbonate of Ammoniac, by Nitrous Acid; 6. Of Sulphate of Ammoniac, by Nitre—7. Non-existence of ammoniacal Nitrites—8. Sources of Error in Analysis—9. Loss in Solutions of Nitrate of Ammoniac during Evaporation.

DIVISION III. *Decomposition of Nitrate of Ammoniac; Preparation of respirable Nitrous Oxide.*

1. Of the Heat required for the Decomposition of Nitrate of Ammoniac—2. Decomposition of Nitrate of Ammoniac; Production of respirable Nitrous Oxide; its Properties—3. Of the Gas remaining after the Absorption of Nitrous Oxide
by

by Water—4. Specific Gravity of Nitrous Oxide—5. Analysis of Nitrous Oxide—6. Minute Examination of the Decomposition of Nitrate of Ammoniac—7. Of the Heat produced during the Decomposition of Nitrate of Ammoniac—8. Decomposition of Nitrate of Ammoniac at high Temperatures—9. Speculations on the Decompositions of Nitrate of Ammoniac—10. Of the Preparation of Nitrous Oxide for Experiments on Respiration.

DIVISION IV. *Experiments and Observations on the Composition of Nitrous Gas, and on its Absorption by different Bodies.*

1. Preliminaries—2. Analysis of Nitrous Gas by Charcoal; 3. By Pyrophorus—4. Additional Observations on the Composition of Nitrous Gas—5. Absorption of Nitrous Gas by Water; 6. By Water of different Kinds; 7. By Solution of pale green Sulphate of Iron; 8. By Solution of green Muriate of Iron; 9. By Solution of Nitrate of Iron; 10. By other metallic Solutions—11. Action of sulphurated Hydrogene on Solution of Sulphate of Iron impregnated with Nitrous Gas—12. Additional Observations.

DIVISION V. *Experiments and Observations on the Production of Nitrous Oxide from Nitrous Gas and Nitric Acid in different Modes.*

1. Preliminaries—2. Conversion of Nitrous Gas into Nitrous Oxide by alkaline Sulphites; 3. By Muriate of Tin; 4. By sulphurated Hydrogene—5. Decomposition of Nitrous Gas by nascent Hydrogene—6. Miscellaneous Observations—7. Recapitulation—8. Production of Nitrous Oxide from metallic Solutions—9. Additional Observations relating to the Production of Nitrous Oxide—10. Decomposition of Aqua regia by Platina, and Evolution of a Gas analogous to oxygenated muriatic Acid, and Nitrogene—11. Action of the electric Spark on a Mixture of Nitrogene and Nitrous Gas—12. General Remarks on the Production of Nitrous Oxide.

RESEARCH II. *Into the Combinations of Nitrous Oxide, and its Decomposition,*

DIVISION

DIVISION I. *Experiments and Observations on the Combinations of Nitrous Oxide.*

1. Combination of Water with Nitrous Oxide ; 2. Of Nitrous Oxide with fluid inflammable Bodies—3. Action of fluid Acids on Nitrous Oxide ; 4. Of saline Solutions ; 5. Of Gases ; 6. Of aëriform Nitrous Oxide on the Alkalies ; History of the Discovery of the Combinations of Nitrous Oxide with the Alkalies—7. Combination of Nitrous Oxide with Potash ; 8. With Soda ; 9. With Ammoniac—10. Probability of forming Compounds of Nitrous Oxide and the alkaline Earths—11. Additional Observations—12. The Properties of Nitrous Oxide resemble those of Acids.

DIV. II. *Decomposition of Nitrous Oxide by combustible Bodies.*

1. Preliminaries—2. Conversion of Nitrous Oxide into Nitrous Acid, and a Gas analogous to atmospheric Air by Ignition—3. Decomposition of Nitrous Oxide by Hydrogene ; 4. By Phosphorus ; 5. By phosphorated Hydrogene ; 6. By Sulphur ; 7. By sulphurated Hydrogene ; 8. By Charcoal ; 9. By Hydrocarbonate—10. Combustion of Iron in Nitrous Oxide ; 11. Of Pyrophorus ; 12. Of the Taper ; 13. Of different compound Bodies—14. General Conclusions relating to the Decomposition of Nitrous Oxide, and to its Analysis—15. Observations on the Combinations of Oxygene and Nitrogene.

In our next Number we shall enter into a particular detail of the author's subsequent researches—concerning the respiration of nitrous oxide, and other gases, by various insects, animals, and human individuals. Before we close this article, however, it may be expected of us to mention the general result of Mr. Davy's inquiries respecting the production, decomposition, and analysis of nitrous oxide. He delivers his opinion upon these subjects in the following terms :

“ There are no reasons for supposing that nitrous oxide is formed in any of the processes of nature ; and the nice equilibrium of affinity by which it is constituted, forbids us to hope for the power of composing it from its simple principles.

We must be content to produce it, either directly or indirectly, from the decomposition of nitric acid: and as in the decomposition of nitrate of ammoniac, not only all the nitrogene of the nitric acid enters into the composition of the nitrous oxide produced, but likewise that of the ammoniac; this process is by far the cheapest, as well as the most expeditious. A mode of producing ammoniac at little expense has been proposed by Mr. Watt. Condensed in the sulphuric acid, it can be easily made to combine with nitric acid, from the decomposition of nitre by double affinity.

“ Nitrous oxide is a gas unalterable in its constitution, at temperatures below ignition. It is composed of oxygene and nitrogene, existing perhaps in the most intimate union which those substances are capable of assuming. Its properties approach to those of acids. It is decomposable by the combustible bodies at very high temperatures, is soluble in double its volume of water, and in half its bulk of most of the inflammable fluids. It is combinable with the alkalies, and capable of forming with them peculiar salts. 100 grains of it are composed of about 63 nitrogene and 37 oxygene. 100 cubic inches of it weigh 50 grains, at 55° temperature, and 30° atmospheric pressure.

“ Nitrous gas is composed of about ,56 oxygene, and ,44 nitrogene, in intimate union. It is soluble in twelve times its bulk of water, and is combinable with the acids and certain metallic solutions; it is possessed of no acid properties, and is decomposable by most of the bodies that attract oxygene strongly, at high temperatures. 100 cubic inches of it weigh about 34 grains, at the mean temperature and pressure.

“ Nitric acid is a substance permanently aëriform at common temperatures, composed of about 1 nitrogene to 2,3 oxygene. It is soluble to a great extent in water, and combinable with the alkalies and nitrous gas. It is decomposable by most of the combustible bodies at certain temperatures. 100 cubic inches of it weigh, at the mean temperature and pressure, nearly 76 grains.”

ART. III. *Les Lois éclairées par les Sciences physiques; ou Traité de Médecine-légale et d'Hygiène publique.* Par FRANÇOIS-EMMANUEL FODERÉ, Médecin de l'Hôspice d'Humanité et de celui des Incensés, à Marseille. Trois Volumes. Octavo. CROULLEBOIS, Paris. An VII.

AS many causes come before courts of justice, that can only be properly understood by persons acquainted with anatomy and the practice of medicine, it has been usual, from very early times, in such cases, to call in the assistance of some physician or surgeon of skill and integrity, on whose determination the verdict, or sentence of the court, generally depends. If a person should die after receiving a wound or blow, it is of importance to know whether the death was occasioned by the accident, or by some disease existing prior to, or that came on after the accident, but had no relation to or dependance on it. It is plain this can only be known to persons who have a competent skill in medicine and surgery. If a person is suspected to have been poisoned, strangled, or in any other way clandestinely murdered, or a new-born infant to have been destroyed after its birth, it is only from the careful and attentive examination of the body, by some experienced practitioner in medicine, that the truth in any of these cases can be discovered.

In England there are women in every parish, called searchers, whose business it is to see the bodies of all persons who die, before they are put into their coffins, or are removed from the place where they died. If the death was sudden, or any marks or circumstances appear, giving reason to suspect violence had been offered, the coroner is called, who always takes with him one or more medical assistants, to aid his judgment, and enable him to give a proper verdict. In all these cases no more skill or judgment is required in the physician or surgeon, than what he is called upon to exhibit every day in the ordinary exercise of his profession. It makes no difference in

the prognostic whether the wound or blow were inflicted with an intention to murder, or occurred by accident; the greater or less danger will depend on the nature and office of the parts injured, the extent of the wound, violence of the blow, or the peculiar habit of body, or constitution of the deceased; and any physician or surgeon who has been properly educated, and has been attentive and diligent in acquiring knowledge in his profession, is qualified to judge what share the accident had in occasioning the death of the party. No particular course of study, therefore, is required to enable the physician or surgeon to give his opinion in any of the cases, on which he may be called to decide in a court of justice. Those of most genius or capacity, who have bestowed considerable labour in acquiring knowledge, or who have had the greatest portion of experience, will deserve the largest share of confidence; and as the life of the accused may, and usually does, depend on the judgment given, two or more medical practitioners should be, and ordinarily are called in consultation. No books, therefore, have been written professedly on the subject in this country, and the term forensic medicine is scarcely known among us. On the continent the case is different, and our author cites a variety of works from which he has taken the materials for the volumes before us. The first seem to have consisted principally of reports of cases that had been decided from the opinions of the physicians or surgeons who had been consulted. Pigray, who was surgeon to Henry the Third of France, relates one in which he was concerned; which, as being curious, we shall transcribe. The parliament of Paris being assembled, he says, in 1589, directed Messieurs le Roi, Falaisean, Renard, and himself, physicians to the king, to visit fourteen prisoners, who had been convicted of witchcraft, and were condemned to die for that crime. We saw the report, Pigray says, on which the determination of the judges had been founded; among other proofs of witchcraft, it was stated, that there were certain parts of the
bodies

bodies of the condemned that were totally devoid of sense or feeling. We ordered the prisoners, women and men, to be stripped of their clothes, pricked them in various parts of their bodies, and found them equally sensible with other persons in the same station of life. On discoursing with them, they appeared to be stupid and bigotted, some of them wishing to die, others indifferent whether they died or lived. Our opinion was, they should rather be put under a course of hellebore than punished with death; and on our report they were discharged from prison.

This report is much to the honour of physic, and shews its professors had made far greater progress in civilization, and in the knowledge of nature, than either the lawyers or clergy of that time. Henry the Fourth of France empowered his first physician to appoint two surgeons in every town, and one in villages and smaller places, to attend the courts of justice in all cases where their services were required. They were sworn to do justice to all parties, and received a stipend for their labour. But these offices becoming in time venal, were frequently possessed by persons who, not being regularly bred to the profession of surgery, were unqualified to perform the duties attached to it; or, which is equally probable, they excited the jealousy of the surgeons, who, in the year 1692, or 1693, obtained an order from government, authorizing them to appoint the persons who should be employed on these occasions, instead of their receiving their appointment from the first physician, as heretofore. Since that time the office is said to have been generally filled with more propriety, as appears from the reports of Gendri, Blegni, Daveaux, &c. In the year 1621, Paul Zacchias published his Medico-legal Questions. The work is much esteemed, we are told, and has passed through several editions. In the year 1702, Michal-Bernard Valentini published his Medico-legal Pandects. He has been followed in the same line by Teicmeyer, Denchar, Brunnar, Beaumer, Sikra, Plenck, Frank, &c. The greater part of these works

works are unknown in this country, neither does it seem necessary they should be here transplanted; the questions discussed in them being only such as are explained in the lectures on anatomy, surgery, and medicine, or are contained in the most approved works on those subjects, with which every practitioner is supposed to be acquainted, or without a competent knowledge in which they ought not to be admitted to practise.

The first part of the work before us is intituled, *Médecine-légale excusante et exceptante*. In this chapter the circumstances rendering persons incapable of being the objects of criminal prosecutions are considered. The principal of these are, infancy, idiotism, delirium, or maniacal affections. In cases of infancy, of confirmed idiotism, or insanity, the court is capable of deciding without the assistance of the physician. In accidental delirium, or in doubtful cases of insanity, the opinion of persons conversant with the disease is constantly applied for.

The second part, called *Médecine-légale civile*, treats “*De la Virginité, et de la Continence.*” In this part the questions, “*Quibus signis dignoscitur virginitas? Quo tempore virgo sit nubilis? Quænam signa sunt impregnantiæ? An homo, ut cætera animalia, certum aliquod tempus habeat nascendi?*” with many more similar questions, are discussed at length, and the opinions of numerous authors cited; and we may add, much ingenuity is exerted in the solution of them, which, in general, as far as the subjects are understood, or are cognizable, seems intelligible and correct. Other questions, of greater difficulty in the solution, follow, or which cannot, perhaps, with perfect justice be decided. A father with his eldest son were killed in battle together; their bodies were found after the engagement, both of them perfectly dead. It was required to know which of them died first, in order to determine whether the estate should descend to the children of the son, or to the remaining children of the father. As both
father

father and son were in perfect health when they went into the field, it was presumed by the court, that the son, as enjoying a more perfect life, or less wasted, would linger longest, consequently would be the longest liver; and it was decreed, that the estate should pass to his children. In this case, as here stated, it is evident no assistance could be obtained from the knowledge of anatomy or medicine. Had the wounds been in different parts, and a larger vessel opened in the one than in the other, a more correct opinion might have been given.

The third part treats *De la Médecine-légale criminelle*. This part, which is more extended than the former, fills the whole of the second volume. In the former parts, the opinion of the physician was called for to enable the court to determine to whom any portion of property that was in dispute belonged; in this, to decide on the liberty or life of the accused. The subjects here discussed are, the signs by which it may be known whether a rape has been committed; whether abortion has been procured by means of drugs, or by any other artificial means; whether a child was born dead, or was destroyed after it came into the world; by what means it may be discovered whether a person had been strangled, poisoned, or died in consequence of wounds, blows, &c. Under each of these heads a variety of cases are related, with the opinions of the examining surgeons, on whose report the accused were generally either released or condemned. These reports are commented on by our author with considerable ability; he shews, in many instances, that the conclusions drawn from the appearances were injudicious and improper, and the sentences founded on them unjust.

A very lusty woman of St. Omer's, 60 years of age, addicted to drinking spirituous liquors to excess, by which she was frequently intoxicated, was found lying dead in her chamber on the morning of the 27th of July 1770, with her head near the corner of a large chest. Her son and her daughter-in-law, with whom she had recently disputed, were accused

of

of having murdered her. The physician and surgeon, who examined the body, reported, they had found various marks of bruises on her arms, side, breast, and throat; that the vessels of the face and head were turgid with blood; and that there was a wound over the right eyebrow extending to the orbit, which they supposed had been inflicted by a knife or piece of glass. Her nostrils were also stuffed with congealed blood. The bruises and suffusion of blood about the head, they said, might be occasioned by a fall or blows. The thoracic and abdominal viscera were in a sound state. The head, where the real cause of the mischief would probably have been found, was not examined. No evidence was produced to prove the accused had been with her in the night. The court, as in the case of Sirvan and the Calasses, thought it more natural that a son and daughter, the latter too pregnant, should murder their mother, than that a drunken old woman should die of an apoplexy. They were both condemned to death. The son was broke on the wheel, to which the daughter was sentenced as soon as she should be delivered. Opportunity having been given by this delay to examine into the case more maturely, and a more intelligent surgeon being employed to explain and account for the death of the woman, the sentence was reversed, and the life of the daughter preserved. This, however, as well as some other of the cases, are rather proofs of the deficiency of the criminal jurisprudence of the French, or of the arbitrary and ferocious disposition of their judges, than of the ignorance of the medical examiners; as their report by no means went to prove the woman had been murdered, or even that the wound and bruises had occasioned her death.

In the course of this section the author gives a long list of poisonous drugs, whether mineral, vegetable, or animal; and points out the symptoms by which it may be known, in general, whether poison has been administered, and what species. This, however, he acknowledges, is frequently very difficult to ascertain,

ascertain, from the symptoms or appearances after death, unless a portion of the poison be found in the stomach, as that viscus is often inflamed and ulcerated when no poison has been taken, and some poisons kill without leaving any impression on the stomach or intestines. When, therefore, he says, we are called to examine the body of a person supposed to be poisoned, although we should find the stomach or intestines inflamed, corroded, or ulcerated, if on carefully examining the contents of the stomach no poisonous substance be discovered, we should content ourselves with describing the state of those viscera; adding, that such appearances might have been occasioned by some severe and acute disease, or by any acrid substance that had been swallowed by the deceased. He notices the observation of the late Mr. John Hunter, that in some cases the gastric juice is so acrid as to erode the coats of the stomach after death. "While I was attending lectures at Turin," the author says, "two female servants of a person of rank in that place, finding a bottle of water, distilled from the leaves of the lauro-cerasus, which they imagined to be some rich cordial, and each of them drinking hastily some mouthfuls, they both died suddenly, convulsed. On opening their bodies, no marks of injury could be discovered, excepting a slight appearance of inflammation on their stomachs."

The fourth and last part, intituled, *De l'Hygiène publique, et de la Police médicale en general*, treats of the preservation of the health and lives of the people. Various important topics are discussed under this head, and many regulations proposed, which can only be enforced by the supreme power of a country: such as draining marshes and fens; paving and widening streets; making sewers; supplying towns with sweet and wholesome water; watching over and examining the corn, wine, beer, meat, fish, and, in general, every kind of necessary provision, that they be each of them good and wholesome in their kind; and that the markets be regularly and properly supplied with them; that hospitals be erected for the relief of

the sick; and that the physicians, surgeons, apothecaries, midwives, and nurses, be well instructed in their several duties and offices; that care be taken to prevent the introduction of the plague, or other infectious and malignant fevers, into a country; or to prevent their becoming general when introduced; that a proper regimen be observed on board ships, particularly ships of war: in hospitals, camps, jails, &c. to prevent the diseases incident to these places; this consists in keeping them well ventilated, clean, and dry; in obliging the men to keep their bodies, clothes, and bedding, clean, and in regulating their diet. Under all these heads many useful and valuable observations occur; they are such, however, as are found in the works of Sir John Pringle, Drs. Lind, Cleghorn, Clark, C. Smyth, Trotter, and many other of our writers, which need not, therefore, be repeated here.

ART. IV. *The Hospital Pupil's Guide through London, in a Series of Letters*; from a PUPIL at St. Thomas's Hospital to his Friend in the Country; recommending the best Manner of a Pupils employing his Time, and interspersed with amusing Anecdotes relative to the History and Œconomy of *Hospital's*. Octavo. 75 pages. WEST and HUGHES, London. 1800. Price 2s.

THE only apology that can be offered to the public for the obtrusion of this puerile and insignificant pamphlet, (the *orthography* of which disgraces the printer as much as the writer,) is, that the author never intended it for publication. These letters are “a part of the correspondence of two young gentlemen,” and have been committed to the press by a young lady, who hoped they might be useful!!

We are here informed by the author, that the apothecary of St. Thomas's Hospital “visits the wards every morning, to enquire if the remedies have done any mischief:” he says,
“the

“the medicines are all so genuine, that it has been found worth while for people to make themselves out-door patients, to procure medicines and sell them :” that, in the military hospital at Chelsea, “called York Hospital, the money wasted must be enormous, for extravagance is the order of the day ;” but “at St. Thomas’s they are taught how to shift in cases of necessity, for an occasional splint they stuff an old stocking with straw ;” and, at Guy’s “there are so many cuts and holes in the wards, and cool air is so freely admitted, that patients come in with sore legs and go out with the rheumatism.” Of the teachers at the Veterinary College, our author observes, “that none of the considerable jobb men, or great horse dealers, have any opinion of their practice. They sometimes consult the professor,” he adds, “as we consult a doctor in the country, only in desperate cases, where nothing is left for him to do but just to sign the death warrant, and give the undertaker his hint. This College is a *degradation of surgery*, and in another war, we shall have the army and navy supplied by farriers instead of surgeons, and if it is not the fashion to study a little more than the generality of pupils do at present, the horse doctors will most probably jockey the profession.”

The judicious reader, we suppose, will agree with us, that such paltry and blundering performances as this now before us cannot much edify the “HOSPITAL PUPIL.” We shall conclude by making one more short extract, which proves how good an opinion the author has of his own medical abilities : “I am very much surprized my dear Henry that there is no *scheme* to keep the young men in London during the summer season, they are *al* flown, dressers and pupils, and there are but three of us left to the care of this great hospital ; either sickness or idleness among us, would oblige the surgeons to dress their own patients, or send to Scotland for a cargo of Mates, as they do when a military expedition is going forwards. All tuition as I told you before is confined to lecturing, and when

the teachers shut up their shops, you would suppose accidents and diseases were postponed 'till the winter.

“ We have had several fractures and *dislocation* and I assure you I am very adroit in managing them ; I did think of staying another winter, but then I despaired of the opportunity of improving myself, as I have done by dressing this summer. An offer has been made to me of going to the East Indies, where I am promised the surgery of a regiment and other advantages. A gentleman who has a son there, promises me all his protection, and as his son is likely to be removed to one of the settlements up the country, he says he shall take me with him and make it worth my while. This is a tempting offer and I see no objection to my accepting it, I am young and may come back in a few years to enjoy *otium cum dignitate*. I think I know the profession well enough to make a safe practitioner if not a TEACHER ; I can do a great deal of good, and I will be cautious not to do any harm.

“ I shall not be able to present myself at Surgeons Hall 'till my return to London, I have no sort of trepidation about my examination, we have accustomed ourselves to question and answer in our walks, and I understand the examiners are gentlemen of liberal minds, who never intend to puzzle or perplex the timid mind, but allow to REAL TALENTS every chance of fair success, *which* at the same time, they abash the bullying blockhead, and send him back to learn his lesson more perfect.”

ART. V. *The Hospital Pupil ; or, an Essay intended to facilitate the Study of Medicine and Surgery : in four Letters.* By JAMES PARKINSON. Duodecimo. 159 pages. SYMONDS, London. 1800. Price 3s. 6d.

THE disappointment we met with in perusing the anonymous letters alluded to in the foregoing article, has been abundantly

abundantly compensated by the pleasure and satisfaction we have derived from Mr. Parkinson's Essay, bearing nearly a similar title. The present work is by no means inferior to the other little volumes of the author, which we lately had occasion to review; and, we are of opinion, it will prove equally acceptable to the generality of medical and chirurgical students. (*See Lond. Med. Rev. and Mag.* N^o V. XII. XV.)

The first letter is on the qualifications necessary for a youth intended for the profession of medicine or surgery. The second treats on the education of a medical student, and suggests an improved course of hospital studies. The third gives directions for the prosecution of a course of studies, according to the present system of medical education. The fourth contains some hints to young men on entering into practice, and on medical jurisprudence.

The author has treated his various subjects in so judicious a manner, and expressed himself with so much perspicuity, that no medical gentleman ought to commence his routine of studies until he has carefully perused these letters. We particularly recommend the contents of Mr. Parkinson's second letter to the attention of parents and guardians of young men intended for this important profession.

ART. VI. *Essai sur les Propriétés médicales de l'Oxigène, et sur l'Application de ce Principe dans les Maladies vénériennes, psoriques, et dartreuses.* Par le Cit. ALYON, Membre de la Société Médicale, &c. Second Edition, considérablement augmentée. Octavo. 230 pages. Paris. An VII. Imported by DE BOFFE. Price 3s. 6d.

IT is not without surprise that we still find practitioners in France and Germany maintaining an opinion, now generally exploded in England, of the antivenereal properties residing in the various combinations of oxygen! The former edition of M. Alyon's performance has been made known through different

ferent channels; it will, therefore, be unnecessary for us to trouble our readers with a long account of the present augmented edition. (See our Review of Mr. BLAIR's last Essay on this subject, vol. iii. p. 156.) The author, so far from receding from his original design, here shews a determined resolution, if possible, to exclude the use of mercury in syphilitic affections. He has added many cases and observations in support of his doctrine; he has availed himself of the authority of Drs. Rollo and Beddoes; he has compared the *favourable* experiments made in England with those observed in France; and says, that the greatest detractors have at length employed the new remedies in lues venerea. Upon the whole, we can only say of this work, it contains the same chemical errors as before,—it is written in the same style of dogmatism and self-conceit,—it promises, as before, to furnish us with incontrovertible facts, but is replete with trifling and inconclusive observations,—it again charges British practitioners with enthusiastic exaggerations, while almost every page seems to fix the accusation on its author.

ART. VII. *Allgemeine Medizinische Annalen des Jahres 1800. Als Fortsetzung der Medizinischen National Zeitung fuer Deutschland, und als Einleitung zu den Allgemeinen Medizinischen Annalen der Neunzehnten Jahrhunderts. i. e. General Medical Annals for the Year 1800. A Continuation of the Medical Gazette for Germany, and as an Introduction to the General Medical Annals of the Nineteenth Century. Quarto. Altenburg. Imported by GEISWEILER.*

THIS work, as its title expresses, is to be considered as a continuation of the *Med. Nat. Zeitung**, which had been carried on for two years prior to the date of the present pub-

* Reviewed in the Lond. Med. Rev. and Mag. vol. iv. p. 190.

lication, and as an introduction to the *Medical Annals of the Nineteenth Century*, which are to commence with the beginning of the next year. We cannot give our readers a better idea of the plan of this work, than by inserting the following extract from the Editor's Preface, prefixed to the first number, for January 1800.

Towards the close of every month, one number of the *Medical Annals* will appear, consisting of six sheets and a half, in the form of the "*Medical National Gazette*" (quarto, with two columns,) that also in this respect these *Annals* may constitute one connected work with the preceding publications. Each of these numbers will comprise the following six heads:

1. *Theory of Medicine.* Under this head will be comprehended the most important reformations made in the science of medicine in general, as well as in each of its particular departments; accounts of new theories; comparisons of former improvements in chemistry, natural philosophy, &c. with those lately made, selected from new publications, and occasionally confronted with other newly advanced principles, in such a manner as to enable the reader to form a just estimate of their relative value.

2. *Practice of Medicine.* Under this title will be presented a systematic view of the principal practical observations and facts contained in late publications, exhibited in a more or less detailed manner, in proportion to their importance and novelty, and occasionally compared with former observations and facts.

3. *Medical Correspondence.* The state of a science in any period of history cannot be better elucidated than by the application made of it by contemporaries. Thus the spirit of medical science, during any period of its progressive improvement, is most accurately characterized by the practice of the physicians of that period. For this reason, the article of medical correspondence inserted in the former publication, will be continued in the present work. But as these *Annals* are

are not designed to serve as a Magazine exclusively appropriated to practical observations, diffuse narrations of remarkable cases of practice, with prolix reasonings upon them, cannot be admitted; particularly as we have already a sufficient number of medical journals, through the medium of which such dissertations may be communicated to the public. On the contrary, the results of the most important cases of practice, concisely narrated, and only what is really remarkable and interesting, are materials for the reception of which this work is peculiarly adapted.

4. *Literature.* This article will contain lists of new medical publications, with short notices of their contents.

5. *News.* Under this general head will be comprehended all such occurrences as are more particularly interesting to the medical man, without falling under the description of acquisitions to science or literature; such as medical institutions and regulations, the establishment or improvement of medical seminaries, medical delinquencies or quackeries, medical prize questions and their answers, &c. communicated in a more or less detailed manner, as in the former publication.

6. *Personal Notices.* These will make the close of every number, including promotions, appointments, dismissions, resignations, changes of residence, honorary remunerations, short biographies, and deaths of physicians and other persons whose connexion with medical affairs and science may seem to authorize the insertion of such particulars concerning them.

To the annual series will be annexed a repertory, on the plan of that of the National Medical Gazette.

ART. VIII. *Pharmacopœia Borussica.* Cum Gratia et Privilegio Sac. Reg. Majest. Quarto. DECKER, Berlin. 1799.

IN perusing this Prussian Pharmacopœia, the reader will not fail to discover that display of superior talents and learning,
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which the names of a Formey and a Klaproth would naturally authorize him to expect in a work executed under their direction.

This Pharmacopœia, which is the third of the kind that has been published for the Prussian dominions, comprehends five principal divisions.

The first contains the *Materia pharmaceutica*, strictly so called. All the natural products with which the shops of apothecaries must be constantly provided, for medicinal use, are here enumerated in alphabetical order, with their Latin, German, and also botanical names: then the properties of those parts of these substances which are employed in medicine are more particularly described, the places specified where they are originally produced, and the manner in which they may most conveniently be procured. The account of the various adulterations practised upon these substances, and the mode of detecting them, are particularly valuable. With respect to this article, the principal objection that can be made is, that many superfluous and inert remedies, for which others of a more efficacious nature should be substituted, are enumerated.

Next follow the *Præparata et Composita*. The processes here directed, are described in a very distinct and accurate manner; the selection of preparations is also made with great judgment. Some formulæ are however inserted, which ought always to be made up after extemporaneous prescription, and others which might appear altogether superfluous. The *Olea cocta*, distilled water, and syrups, of which we find such a multitude in other Pharmacopœias, are here very properly reduced to a very small number. It is a commendable improvement, that in every composition with opium, the proportion of this substance contained in a determinate quantity of the compound is accurately specified.

The *Tabula nominum mutatorum*, which contains on one page the *nomina antiquata*, and on the opposite one the *nova*, is a useful guide amongst the multiplicity of synonymous terms

which perplex the language of pharmacy. This article is followed by a very complete index; and the work concludes with a *Selectus medicaminum, quæ in officinis minorum oppidorum legitimè prostabunt*, arranged in the form of an index.

ART. IX. *Versuch einer chronologischen Uebersicht, &c.: i.e. An Essay towards a chronological View of the literary History of Medicine, designed to promote and facilitate the Study of this Science.* By Dr. J. G. KNEBEL. Breslau. 1799.

THE author of this work displays considerable abilities for the task he has undertaken, though his performance might have afforded fewer opportunities for censure, had he observed the precept of *nonum prematur in annum*. The subject is arranged into four chronological tables, the first of which brings down the literature of medicine to the æra of Hippocrates; the second, to the death of Galen; the third, to the reformation effected by Paracelsus; and the fourth, to the present times. With respect to the dates, the author appears to have chiefly followed Saxe's *Onomasticon literarium*. The first table might have been considerably shorter, if not entirely omitted; as no reader can be much interested in the imperfect accounts here collected concerning Melampus, Moses, Hecate, Medea, Orpheus, Peleus, Achilles, Alexanor, king Solomon, Aha, Lycurgus, Hezekias, Tobias, Thales, Uecho, Töxaris, and Issus; besides that many erroneous opinions are advanced in the illustrations annexed to it.—Second period: The life of Hippocrates is narrated with too great prolixity, and the author has not availed himself of the best editions of his works. In this table we meet with many names which one should scarcely have suspected to have any connexion with medical literature. The accounts of the empirics, dogmatists, and methodists, are tedious, and drawn from the common sources of information.—Third period: In his view of this period,

period, the author has chiefly followed Ackermann and Sprengel.—In the fourth period, he frequently treats his subjects in a very concise and imperfect manner, and many of the best works of the authors he mentions are omitted. Of the latest physicians none who are now living are mentioned. This publication is rendered more commodious by an index of the names.

Med. Chir. Zeit.

ART. X. *Tabelle ueber die bis jetzt bekannten Gasarten, &c.: i. e. Table of the Gases hitherto known, with an Enumeration of their distinguishing Characters and Properties, the Manner of obtaining them, the Substances from which they are procured, and their constituent Principles.* By Dr. J. B. TROMSDORF. Second Edition. HOFFMANN, Berlin. 1799.

WE are here presented with a very useful comprehensive view of the different gases, in a single table in large folio. The first table of this kind appeared as far back as the year 1790, and was received by the public with universal approbation. The present edition has received all those corrections and improvements which the progress of chemical science since that period required. Seventeen species of gases are here enumerated, and Professor Scherer's improved German chemical Nomenclature is adopted.

Med. Chir. Zeit.

ART. XI. *Versuch einer Geschichte des Lichts in Ruecksicht seines Einflusses, &c.: i. e. Sketch of a History of Light, with respect to its Influence upon natural Bodies in general, and particularly upon the human System, independent of its Action upon the Organ of Vision.* By Dr. J. C. EBERMAYER. CARL and Co. Osnaburgh. 1799.

THIS publication is an enlarged edition of the author's prize-dissertation, *De Lucis in Corpore humano vivo, præter Visum,*

Visum, Efficacia. It is divided into three sections; 1. On the Nature of Light; 2. On the Influence of Light upon natural Bodies in general; 3. On the Influence of Light upon the human System, independent of the Sense of Vision. The first section is, for the greater part, historical, and very carefully collected. Mankind became early attentive to the beneficial influence of light upon natural bodies, as the most ancient records of the human understanding evince. Aristotle had attributed the green colour of vegetables to the influence of the solar rays, and considered the white colour in animals as a sign of their debility. The ancients were also aware of the effects of light in various diseases, and upon their knowledge of these effects they founded many dietetic rules, which modern physicians have neglected, to the great detriment of the healing art. The *methodical* sect laid great stress upon the augmentation and diminution of the stimulus of light, in diseases. Many passages relative to this subject have been collected by Triller in his *Clinotechnia medico-antiquaria*, Frankfurt 1774. The great Lord Verulam was the first who recommended, in his work *De Augmentis Scientiarum*, a more accurate physical investigation of the properties of light; and from the discovery of the telescope, and Kepler's important inquiries upon the nature of vision, Descartes was led to his hypothesis, that light consists in the motions of a very subtile fluid, produced by the pressure of a luminous body. Newton's system of emanation, and Euler's hypothesis, that a ray of light is a series of vibrations of æther, are here considered. The discovery of phosphorescent substances gave the inquiries into the nature of light a new direction.—*Opinions of the phlogistic and antiphlogistic chemists on the nature of light.* The arguments hitherto adduced in favour of the immateriality of light fall far short of demonstration, so that we are still under the necessity of supposing a matter of light, as a very subtile elastic fluid, which produces no sensible effect on the most delicate balance, which diffuses itself with the greatest velocity

velocity in every direction, penetrates through transparent substances, unites with many others, and in the combinations which it forms with them, loses its luminous quality, which is again restored to it when the combination is dissolved. The investigation of the effects of light upon nature in general is a matter of the utmost difficulty. By its extreme velocity it constantly eludes our researches: it cannot be exhibited free from all combination, on account of the great affinity which subsists between the matter of light, and the matter of heat: light and heat are almost always combined with each other; so that we are easily induced to ascribe to the one, properties which in reality belong to the other. With the air of the atmosphere the matter of light exists in a state of chemical combination; for one of the component parts of the atmospheric air, namely, vital air, is a compound of oxygene, the matter of light, and the matter of heat. Light has the property of extricating vital air from various substances; and the smaller the quantity of light, the less pure is the atmospheric air.—*Influence of light upon the mineral kingdom.* Luminous minerals. Salts crystallize with the greater facility, in proportion as they are acted upon by a greater quantity of light. The mineral acids acquire a deeper colour by exposure to light, as they are thereby deprived of a portion of their oxygene.—*Influence of light upon the vegetable kingdom.* Plants incline themselves towards the light; from it their leaves, petals, and fruit derive their colour; plants excluded from the light acquire a pale hue; and light contributes in a very extraordinary manner to promote vegetation, as well as the extrication of vital air from plants. On the other hand, the germination of seeds is promoted by the exclusion of light; and plants that have begun to fade in a strong light, recover themselves in the dark. Light has a considerable influence upon the formation of the resinous matter in plants; it acts upon them as the grand stimulus by which their vital energy is sustained, though its too violent action produces exhaustion and debility, as consequences of an inordinate exaltation

exaltation of the powers of life.—*Influence of light on the animal kingdom.* It acts upon animals as a stimulus, and has the most beneficial effect in augmenting the vital energy. Many phenomena in phosphorescent animals shew very plainly that light enters into combinations both in brute animals and in the human system, and that under certain circumstances, which have not as yet been sufficiently investigated, it is again set free from these combinations. The matter of light has an unequivocal influence upon the production of animal heat: when the vital air is decomposed in the lungs, the matter of light which is extricated, operates upon the matter of heat existing in the animal system, as a gentle stimulus, and excites it into action. Next follow inquiries concerning the influence of light, in a physiological, pathological, and therapeutical view. The facts here adduced are well arranged and applied; though we may remark that the author frequently attributes exclusively to light, what ought rather to be ascribed to the influence of the atmosphere, which constantly surrounds and acts upon the human body. Though this work cannot be considered as having added either to theoretical or practical medicine; yet the author deserves commendation for having collected with industry, and arranged with skill, the known facts and theories relative to his subject, which he has treated as an able writer, who has the powers of language at his command.

Med. Chir. Zeit.

ART. XII. *Medical Jurisprudence. On Madness.* By JOHN JOHNSTONE, M.D. Octavo. 48 pages. JOHNSON, London. Price 2s. 1800.

THIS little pamphlet is only part of a larger work the author proposes to publish, comprehending a general treatise on medical jurisprudence. He was induced to detach this from attending to the trial of Hadfield; which was conducted, he thinks, on right principles. If a person be found to have been insane, prior to having committed any illegal act, and con-

tinues

tinues to be insane afterwards, he cannot, or ought not, to be deemed accountable for the act, although perpetrated with all the appearance of thought and contrivance. "Nor is the man," the author says, "who has a settled and recurring hallucination of insanity, to be trusted, or to be accountable for his actions, though he may at times reason right, and appear sedate and rational, and even design and contrive. On the trial of Hadfield, the Attorney-General observed, 'that there was thought, design, and contrivance in all he did, and therefore he had a mind equal to design and contrivance.' If Hadfield had been of sound mind, his thought, design, and contrivance were all evidences of guilt; but in themselves they are no proof of sound mind. Madmen think, but their thoughts and conceptions of things are false and inadequate; and as to design and contrivance, madmen are frequently very subtle in compassing their ends. Madmen are generally conscious of their actions, or of the results of their cogitations, and indeed the means employed to coerce or correct them are employed upon this principle. But the origin of the evil lies in the mind, which in its diseased state can never be expected to think right or to act right, though it may perchance do both; and thinking and acting right 'are such tight and compact things in themselves, and have such a self-unity in their nature,' that they ought never to be supposed capable of disjunction."

Insane persons are frequently capable of discoursing on all topics, excepting that constituting their insanity, with the same degree of clearness, acuteness, and ingenuity, as before they were affected with the disease. This becomes a frequent source of mistake and embarrassment; persons unused to seeing maniacal patients often imagining their relatives or friends are unjustly confined, or continued in confinement longer than was necessary, and applying to the courts to procure their release. Mr. Erskine, in the course of his pleadings for Hadfield, related a case in which the patient was
himself

himself the prosecutor: "I remember," said that ingenious advocate, "the case of a man who indicted the keeper of a mad-house at Hoxton, for imprisoning him; and in the course of the trial, though I endeavoured by every means in my power, by every question I could put, to draw from him some proof of the real state of his mind, yet such was his subtlety, and such his caution, that he fairly baffled me at every point. And it was only by Dr. Sims appearing in court that he discovered himself; for he no sooner saw the Doctor, than he addressed him as the Lord and Saviour of mankind. The keeper of the mad-house was therefore acquitted."

We shall make no farther extracts from this pamphlet, in which the reader will find the subject treated in a manner highly creditable to the author.

ART. XIII. *Versuch einer theoretisch-practischen Darstellung der Wirkungen der Arzeneyen, &c.: i.e. An Essay towards a theoretico-practical View of the Manner in which Medicines produce their Effects.* By FREDERICK KRETSCHMAR, M.D. Part I. Octavo. 216 pages. Halle. 1800.

OF all the branches of science indispensably necessary to be studied by the practical physician, none is more worthy of notice than that which treats on the operation of medicines, as it is of the utmost importance in the cure of diseases. It is, however, certain, that there are many facts, established by experience, respecting the effects of various medicines, which have never yet been explained in a satisfactory manner, and which, if properly elucidated, might throw great light on the art of healing, and enable the physician to prescribe with more certainty and with greater confidence of success. The present Essay, which is intended, in some measure, to supply this deficiency, must therefore be an acceptable present to the medical world in general, and to those, in particular, who have

have made this useful branch of medicine a principal object of their research. The author, in this First Part, has endeavoured, from actual observations and an ingenious comparison of the laws of animal life, to give a rational explanation of the phenomena produced by medicines in general. The Second Part, which is intended to follow, will contain an explanation of those of individual medicines.

The first chapter contains observations on the difference between medicines, poisons, and food: the author then proceeds to give an account of the plan he has adopted in the treatment of his subject, which is entirely new; and if the second or practical part be executed with the same judgment and ability as that now announced, it will be an acquisition of considerable value to the medical practitioner. The plan of the work, or method in which the author treats his subject, is founded on the following position: "The application of the highly important laws of the vital power and of the operation of medicines, is not only a real benefit to the science of medicine, but is particularly useful in this respect, that one is illustrated and confirmed by the other. The greater, therefore, our progress is in a knowledge of the laws of animal life, the more we shall be convinced, that by this knowledge alone we can acquire those general ideas which will enable us to have a proper conception of the operation and effects of medicines: the phenomena of health and sickness, and of disease produced by medicine, or artificial means, all depend on the same laws, the laws of animal nature." The various, complex, and relative effects of medicines are therefore traced back by the author to general and simple effects; and these simple and general effects are founded on the fixed and established laws of animal life, which he examines both in a physiological and a pathological point of view. It is indeed no easy task to trace back the effects of medicines, as established by experience, to general principles capable of explaining the individual effects of each; for, besides that the doctrine of the animal economy

is still very imperfect and involved in a considerable degree of obscurity, the effects of medicines must be considered under so many points of view, that it requires long practice and much research before the physician can embrace all the parts of this branch of medicine, and become thoroughly acquainted with the whole.

The second chapter contains an illustration of the mode in which medicines communicate themselves (*sich mittheilen*) to the animal body, and to those organs on which they exercise an immediate action. This is effected, 1. by absorption; 2. penetrability; 3. susceptibility of imitation; 4. infusion. The organs by which they are immediately received are, 1. the stomach; 2. the skin; 3. the rectum; 4. the nose; 5. the lungs.

The third chapter defines those laws according to which the effects of medicines take place. It is divided into different sections:

I. The mode in which medicines act according to physical laws.

II. The mode in which medicines act according to organic laws.

III. The mode in which medicines act according to the laws of organized life. This section contains, 1. the relation of the active vital power to the organized structure of the soft parts; relation of the vital phenomena to the coarse organic and organized matter; relation of the same to the fine or vital matter, that is, to the vital spirits; 2. relation of the vital phenomena to organic nature and the quantity of the blood; 3. reciprocal relation of the vessels to the fluids they contain; 4. relation of the power of association to that of assimilation.

IV. Mode in which medicines act according to the laws of the vital power. An account of those changes which medicines are capable of producing in the vital power; 1. of those medicines which directly increase the vital power; 2. of those which directly lessen, derange, or oppress the vital power. To

the first class belong all those medicines which have a pleasant, penetrating smell and taste; as volatile and agreeable aromatics, wine, spirit of wine,edulcorated acids, &c. To the second, narcotics, as opium and other things of the same kind. Both these effects, lessened, impeded, or uncommonly changed vital action, and increased vital action, or an excited exertion in the vital power to recover an equilibrium, are changes which deviate from the sound state of that power. As both these effects are seldom separated from each other, they may with propriety be comprehended under one head, viz. those which produce disease. By these disease-creating effects, that is, by disease artificially excited, for which purpose medicines are employed, the vital power is roused to maintain a regular contest with the real existing disease; and if this contest be favoured in the proper degree and manner, the vital power will be left in peaceable possession of its usual phenomena; that is, those effects of the medicines which produce disease will change their nature and become salutary. This law is one of the most important discoveries of which the new art [why *new* art?] of medicine can boast: it is as comprehensive as useful in its application, and, in a great measure, may be considered as a fundamental principle in the healing art, in regard to the operation of medicines; for, like all those laws which nature follows in the curing of diseases, it is attended with no deception.

The author next proceeds to those laws, according to which nature, in consequence of existing irregularities, assumes a salutary activity, and which, without doubt, afford the best standard for judging of the effects of medicines, and the surest guide to direct us in their application. Speaking of the effects of medicines, in regard to the activity of the vital principle, the author says: The immediate causes of all internal morbid phenomena are, 1. vital activity changed in its degree, that is, lessened or increased; 2. vital activity changed, both in its degree and nature, that is, inverted, deranged; 3. an
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irregular

irregular distribution of it. According to this view of the subject, the effects of medicines may be divided into three classes :

Class I. Of those effects of medicines which exalt or depress the vital power. The agents which produce these effects are stimulants and narcotics.

The new art of healing, the principles of which the author makes the groundwork of his observations, is entitled to great merit, for having extended the exciting method of cure, and applied it in a more proper manner. To stimulate with efficacy is nothing else than to excite the dormant healing power of nature. This art is borrowed immediately from nature herself. The sooner any medicine produces an effect, the shorter is its duration ; on the other hand, the slower a medicine operates, the more lasting will be the effect. According to these principles, the laws of irritability are determined by the author, both physiologically and pathologically.

Class II. Of those effects of medicines which change the action of the vital power, both in regard to degree and nature.

The author here treats on the effects by which irritability is moderated ; those, for example, which allay pain and spasmodic affections ; he also takes a short view of the specific effects produced on the system and organs, both by those medicines that excite and those that lessen irritability ; and adds some observations on the specific effects of medicines, on the vessels of assimilation, and the organs of excretion and secretion.

Class III. Of those effects of medicines which restore the equilibrium of the vital power when unequally distributed.

The fifth section treats of the mode in which medicines operate, in regard to the reciprocal action of systems and organs. After a physiological definition of association, antagonism, sympathy, or the consent of organs and systems, the author proceeds to

Class I. Or those effects of medicines which follow the
laws

laws of association: under this head he considers topical means.

The strength and duration of the local effects of a medicine are in the inverse ratio of those of the general effects. Means which produce a strong and continued local effect have commonly a weak effect by association; for example, arsenic; and on the other hand, means which produce a great effect by association, or sympathy, have a very weak and short local effect; as for example, camphor, musk, sal ammoniac, wine, &c. Intellectual stimulants are such as immediately excite the powers of the soul or mind; they often exceed in activity, material means or medicines; and they appear to have great efficacy, by a sympathetic excitement of the nervous power proceeding from the brain, in diseases peculiarly nervous, as intermittent fevers, hypochondriasis, mania, &c. The author explains the expression “immaterial disease, *morbus sine materie*,” to be “*impressio remanens nervorum*.”

Class II. Of those effects of medicines which follow the laws of association and antipathy, sympathy and antipathy. According to the laws of the antagonismus of the organs, reaction generally excited lessens local action; that is to say, a general disease cures a local one; for example, reaction generally excited in the vascular system removes local obstructions; and, on the other hand, a high degree of local excitement, according to the same laws, removes a general affection, that is, an artificial topical disease often cures a general one. Under this head the author takes a view of those means which produce derivation, and treats of metastasis, &c. The juices destined for separation or evacuation, whether sound or of a diseased nature, follow the antagonismus of the organs, or the direction of irritability. Medicines even follow the direction of the juices, and consequently their effects follow the direction of irritability. In women who suckle, the circulation of the juices towards the breast is increased. Hence it happens, that medicines administered to females in that condition often
produce

produce no effect upon them; but, by means of the milk, act only, or in particular, on the children. After treating of the effects of medicines in regard to association and the antagonism of the powers, and giving a pathologic explanation of the disproportion between the animal powers; for example, between the vital power and the plastic power; the author concludes this Part with an account of the effects of those medicines which lessen or impede the powers, and a pathologic definition of the difference between clonic and tonic spasms.

Teutsche Fama.

ART. XIV. Professor LODER's *Journal für die Chirurgie, &c.*

(Continued from page 403, vol. iv.)

5. *On the beneficial Effects of Petroleum, or Rock-oil, in Suppression of Urine.* By Dr. MICHAELIS, Physician to the Garrison at Marburg.

THREE cases are here recorded, which seem to prove that petroleum possesses a very singular efficacy in restoring the tone of the bladder.

Case 1. A woman who had lain in of her first child, and had probably been unskilfully treated by the midwife, laboured under a suppression of urine. After this had continued nearly a week, a physician and surgeon were called in. The catheter was introduced, which procured a discharge of dark-coloured fetid urine, followed by the most excruciating pains in the region of the bladder and whole abdomen. As the bladder filled again, it was necessary to perform the operation a second time, which was succeeded by severe pain over the whole body. Various remedies were now employed, without procuring relief. The urine was drawn off twice a day, and the discharge was always followed by the pains, for the relief of which oily injections were used. After the patient had remained

remained in this state for the space of about four weeks, Dr. M. was called in. He found nothing preternatural in the structure of the parts; the catheter was introduced with facility and without any resistance being perceived at the neck of the bladder. He therefore attributed the suppression of urine to a paralysis of the organ, the consequence of the long retention at first occasioned by an inflammatory state or contusion of the neck of the bladder; and the pains experienced after the discharge, to the collapse of the bladder, which had entirely lost its power of contraction. The external and internal use of camphor proving ineffectual, frictions with petroleum on the pubis and perinæum were ordered, and at the same time three or four drops were directed to be taken internally four times a-day. After the remedy had been twice used, the patient was enabled to discharge her urine by her own efforts, though not without considerable pain. The internal use of the petroleum was now suspended, and in a short time, by a frequent use of the frictions, and the patient following the directions given her, to void her urine as soon as she felt the smallest inclination to do so, the functions of the bladder were completely restored.

Case 2. A young woman had been delivered two years ago of an infant. Since her delivery she had been affected with a constant incontinence of urine, together with which a discharge of fetid ichor issued from the vagina. These complaints were accompanied with the most violent pains in the genitals. When Dr. M. was called in, he found all these parts so much excoriated and ulcerated, as to give reason to apprehend a cancer of the uterus. The discharge of fetid ichor, and the pains, were entirely removed by the use of alum, sanguis draconis, and kino; but the incontinence of urine still continued. This was at length also removed by the continued use of petroleum applied externally, and corroborant injections thrown into the vagina.

Case 3. A woman who had been unskilfully treated after a
severe

severe labour, was attacked with a suppression of urine, and all the symptoms that announce the approach of the child-bed fever. Dr. M. was applied to; but as he lived at a considerable distance from the patient, he could not go to see her, and her circumstances did not permit her to send for a surgeon to draw off the urine. He therefore directed an opening draught, to which a quantity of *valerian* was added, and warm injections to be thrown into the vagina, in order to procure a return of the menses, and to abate the apprehended inflammation. Besides these remedies, he directed the external use of petroleum. Not long after, he received intelligence that the patient had been freed from all her complaints. Dr. M. remarks, that as he did not see this woman, he cannot determine with certainty how far the *valerian* may have contributed to her cure; but from the unequivocal effects of the petroleum in the two preceding cases, he thinks himself authorized to ascribe it principally to the use of this remedy. He has also employed it with speedy and beneficial effect, in the suppression and difficulty of voiding urine, which takes place in persons who have caught cold, and in the course of inflammatory diseases, particularly the dysentery.

6. *Case of a considerable Wound of the Head healed by the Powers of Nature alone.* By Dr. WILDENMANN, of Wallerstein.

A man upwards of 50 years of age, inured to hard labour, had received a kick from a horse in the middle of the right parietal bone of the cranium. For four days he lay in a state of insensibility, during which he was blooded, took a spirituous draught with nitre, and the wound of the head was covered with a plaster, without farther examination. After the aforesaid period had elapsed, the patient apparently recovered, and remained without any further complaint. A fortnight after, as the wound shewed no disposition to heal, Dr. W. was called in. He found the external teguments lacerated, and upon applying the probe, it penetrated about an inch and an half deep through the cranium, without giving

giving any sensation to the patient. Upon enlarging the wound by a crucial incision, the hole in the parietal bone appeared about the size of a shilling, and both laminæ fractured throughout their whole extent. After extracting a great number of the splinters, the dura mater was found to be separated, round the edge of the hole, and so much lacerated that the brain and its pulsatory motion could be distinctly seen. The wound was dressed in the usual manner, and as the patient made no new complaints, he was left to the care of the surgeon of the village.

On visiting him some days after, Dr. W. found him much worse. He articulated with difficulty, his memory was greatly impaired, and he spoke incoherently. The whole left side of the body was paralytic, and the left angle of the mouth drawn upwards. The appearance of the pus that issued from the wound, seemed however to be improved, and its quantity rather diminished. At the bottom of the hole in the cranium a round orifice appeared, of the size of a sixpenny-piece, which performed a kind of peristaltic motion, and discharged a quantity of thin yellow ichor. As the symptoms did not appear to require any new remedies, none were prescribed.

Seven days after, Dr. W. visited the patient again, and found him free from complaint. The hemiplegia was removed, and articulation restored. The discharge of matter from the wound had almost ceased, and the orifice in the dura mater was diminished to the size of a pin's head. Dr. W. made two incisions at the orifice, in order to afford a vent for any noxious matter that might still be remaining within it. The whole circumference of the wound appeared to be in a good healing state, and the patient complained of nothing; on which account no alteration was made in his treatment.

On a fine morning, two days after this visit, the patient walked out, and in the afternoon some incident vexed him. In the evening his face and arms were affected with convulsions, of which the distortions of the mouth were the most

remarkable. These convulsions were followed by shooting pains in the left side of the thorax, which continued for some days. Cooling diluent liquors were prescribed. The wound looked well, and the orifice of the dura mater was again diminished to the size of a pin's head, with scarce any discharge. In a few days time, the pains of the thorax were removed, and soon after, the orifice in the dura mater closed. The larger orifice of the cranium filled itself with new flesh, and in a little time the man was completely recovered, and able to go about his usual occupations.

7. *Observations on varicose Tumours of the Labia externa pudendi.* By Prof. SIEBOLD, of Wirtzburg.

Amongst the local impediments that interrupt the passage of the child in delivery, we sometimes meet with varicose swellings of the *labia externa pudendi*. When these occurrences take place in labours that would otherwise have been performed without much difficulty, it is generally in the case of women, who, during the period of gestation, have laboured under varicose tumours, in one, or both, of the lower extremities. The cause of such preternatural dilatations of the veins of the lower extremities, is the pressure of the gravid uterus upon the adjacent large vessels of the pelvis. Sometimes, according to Baudelocque, the oblique position of the uterus towards the right side, may contribute to produce these appearances. The tumefied veins of the labia externa sometimes burst during labour, and suddenly produce a large hard tumour, which occupies the whole labium, dilating not only that, but also the cellular texture of the vagina connected with it, to such a size, as to render the passage of the head of the child, if not impossible, at least very difficult. At times these tumours suddenly burst open, whereby a laceration of the integuments and a hæmorrhage are produced, which endanger the lives both of the mother and the child. It is particularly unfavourable, when in these cases the head of the child remains for some time wedged in the pelvis; and the

the mother, exhausted by the hæmorrhage, cannot assist her pains properly, especially if at the same time the head of the child is large. Three cases of this kind have occurred in my practice, in all of which, however, the delivery was happily accomplished.

With these observations the author introduces his account of the following three cases.

Case 1. He was sent for, in haste, to visit a woman at some distance in the country, who, he was told, laboured under a very violent hæmorrhage. When he came to her, he found her in bed with her child. Her face was very pale; her pulse small and feeble. The midwife related, that during delivery, when the head of the child was already protruded below the brim of the pelvis, a violent hæmorrhage, succeeded by a fainting-fit, had suddenly come on; and that not knowing how to stop the flow of blood, and apprehensive lest it might prove fatal both to mother and child, before the delivery could be accomplished, she had sent, in haste, for Dr. S. The mother had however recovered from her syncope; the pains had returned; the delivery had been happily accomplished; and the hæmorrhage had since then entirely ceased.

The mother confessed, that, impatient at the tediousness of her labour, she had strained herself too much, which might probably have occasioned the hæmorrhage. On examining the parts, Dr. S. found, on the inner side of the left labium externum, a fissure about an inch and a half in width, length, and depth, filled with coagulated blood, which he supposed to be the place where a varicose tumour, together with the distended integuments, had burst. He filled the wound with dry-lint, and having dressed it with a digestive ointment and adhesive plaister, it soon healed so completely that the scar which remained was scarcely perceptible.

Case 2. A woman, of very small stature, 36 years of age, had been delivered of her seventh child. Though the delivery was successfully accomplished, her pains had been very violent,

lent, and after the birth of her child she complained of pain in the left labium. On examining the part, a tumour almost of the size of a man's fist, and of a livid colour verging towards black, had been discovered. After discutient and emollient applications had been used without effect, for the space of eight days, Dr. S. was called in. He found a tumour, produced by extravasated blood accumulated in the cellular texture, which he proposed to lay open. An incision was accordingly made, which discharged two tea-cups full of black extravasated blood. The wound was then filled with dry lint; a good suppuration followed; and in the space of three weeks it was completely healed.

Case 3. A lady, 38 years of age, of a small stature but robust constitution, was attended in her seventh labour by Dr. S. When the head of the child was protruded below the brim of the pelvis, a very large tumour appeared, situated longitudinally on the left labium externum, which grew larger at every *nisus*, and at length increased to such a size, as to give reason for apprehending that the passage of the head might be obstructed. After several very painful efforts, however, the delivery was accomplished. Before the mother was put to bed, Dr. S. examined the tumour. It was of a blackish colour, very painful to the touch, and appeared to be of the same nature as those mentioned in the two former cases. He advised an incision, but it was not complied with. Instead of this, saturnine applications with sal-ammoniac were used, which at first produced an abatement of the tension and pain; but after they had been continued for two months, symptoms of pyrexia supervened, with inflammation and suppuration of the tumour. At length, after a very painful night, the swelling burst spontaneously, and discharged a great quantity of pus mixed with blood. As the orifice was very small, having a large cavity within, the patient was prevailed upon to submit to an incision. This was accordingly performed, and the cavity having been filled up with dry lint, the cure proceeded

as successfully as in the two former cases. After opening the tumour, Dr. S. had remarked a very copious discharge of blood and mucus, which seemingly proceeded from the uterus. It appeared that whilst the tumour remained the menstrual flux had been suspended. He therefore concluded that this discharge consisted of the menstrual blood, which had till then been detained in the cavity of the uterus, in consequence of the os tinæ being compressed by the size of the swelling, which extended a considerable way up the vagina.

The author proceeds to recommend the following rules to the observance of obstetrical practitioners, in cases where during gestation varicose swellings appear in the lower extremities, or upon the labia pudendi, in order to prevent extravasation taking place during parturition.

1. When the subject is young and plethoric, and the varicose swellings very much tumefied, a moderate bleeding should be performed before delivery. The limb on which the tumours appear may also be bandaged, but not too tight.

2. When the head of the child is protruded below the brim of the pelvis, the woman should be placed in a chair, not in a perpendicular, but in a horizontal posture; as one may then compress the varicose vessels with the hand.

3. If, notwithstanding these precautions, a vessel should burst, and a tumour be produced by the extravasated blood, of such a size as to obstruct the passage of the head, it ought immediately to be laid open, and the extravasated blood discharged, upon which the head of the child will immediately appear. But should this not happen, the forceps must be used in order to accelerate the delivery.

4. Should the tumour burst of itself, and occasion a great loss of blood, the forceps should also be used to accelerate the delivery, as this will be the best method of stopping the hæmorrhage.

5. Should the tumour, after delivery, become inflamed,
or

or even gangrenous, as may sometimes happen, it ought to be scarified, and antiseptic remedies used.

6. Where a good suppuration takes place, the simplest dressings possible ought to be applied to the ulcer ; for nature will herself effect the rest of the cure.

(To be continued.)

MEDICAL CORRESPONDENCE.

(Communications for this department will be gratefully received.)

Art. 15. *Remarks on the acoustic Trumpet.* By Professor ARNEMAN, of Göttingen. [Magaz. für die Wundarz.]

(Illustrated by an Engraving.)

THE propagation of sound, and that of light, (our author says,) are proportionate to each other ; but we are not authorized to suppose, that the operation of sound upon the organ of hearing is produced in the same manner as the sense of vision receives its impressions. The ideas we derive from our organ of hearing are a kind of language of sensation. Even persons affected with a very high degree of deafness frequently hear single tones, if they be sufficiently strong ; or, to speak more scientifically, they feel the vibrations of the strong rays of sound.

The use of the hearing-trumpet depends entirely upon the following principle deduced from experience : The rays of sound are to be,

(1.) Thrown, by means of the metal, into stronger vibratory motions ; and thereby, (2.) a reverberation and new reflection of the sound is produced.

In this manner the sound is certainly rendered considerably more audible ; but, at the same time, if the hearing-trumpet be not properly constructed, it becomes proportionably less distinct.

The best hearing-trumpets are those of the most simple form; namely, such as are either perfectly straight, or but very little curved. The most important point is, that they should have a wide mouth, so as to collect a large quantity of sound; which, by being in a manner condensed, is adequate to produce an impression upon the nerves of the organ of hearing. The curved hearing-trumpets cannot produce the same effect; besides that the curvilinear form renders it more difficult for the artist to shape the tube in a perfectly regular manner.

The conical hearing-trumpets are likewise inadequate to the intended purpose; the sound which enters them ceases to be reflected as soon as it reaches the place where the angle begins to exceed a right one, and is from thence thrown back again out of the tube. The angles of reflection increase, according to the observations of Lambert, as the odd numbers, and the last that can be admitted, must not amount to quite 90° *. Unless, therefore, the cone be truncated, the form of the instrument is an improper one; because the sound which enters is again thrown back before it reaches the point of the cone.

The parabolical form is the best. In a hearing-trumpet of this construction, the sound coming from a distance enters in a direction nearly parallel with its axis, and is by reflection concentrated into a kind of focus.

The hearing-trumpets with a hemispherical mouth are not so perfect as the former; for in these the sound is reflected only from the centre, and the rays are not collected with the same facility.

The frequent applications that have been made to me for hearing-trumpets, by persons labouring under defects of the auditory organ, have induced me to insert, from time to time, in this Magazine, sketches of such of these instruments as I have found the most serviceable. Much, however, still re-

* Vid. Lambert's Dissertation on acoustic Instruments, p. 64.

mains to be done by future improvements and inventions ; I therefore request all medical men, whose experience has furnished them with information upon this subject, to communicate it to me, as a contribution to the knowledge of this very important and hitherto much neglected class of diseases.

With the name of the inventor of the instrument represented on the plate I am not acquainted. It is, however, one of the best of the kind that I know, with respect to the real advantage it affords to the patient ; though it may be objected to, as not contributing to conceal the defect which it is intended to alleviate.

The whole of the instrument must be made of thin brass, and not weigh more than eight ounces. A person may carry it about him with very little inconvenience, and it may be applied equally well to either ear. The proper size of the trumpet is four times that of the figure given in this plate.

For the use of artists who may wish to construct similar instruments, I shall here set down the proper dimensions, and at the same time notice the principal points to be attended to. It is necessary that the artist should follow them with the utmost accuracy, as the slightest, and, as it might appear, the most insignificant deviation, from the directions to be laid down, would greatly impair the utility of the instrument ; whereas by observing all the proportions with exact care, he will be able to produce an instrument, that will afford as much relief to the patient as any one that has hitherto been constructed. Whenever I have had occasion to direct one to be made, I have not only tried it myself, and found that it enabled me to hear the motion of a watch at 50 or 60 paces distance, as distinctly as I could when, without it, I held the watch only one foot from my ear,—but I have likewise tried the experiment with persons very hard of hearing, and found that it proved of greater service to them than any other instrument. (*See the Plate, opposite page 65.*)

This instrument (*Fig. 1*) consists of several parts. H G I F represent the cup; which, at H I, is 3 Paris inches and 6 lines in diameter. F G has 2 inches and 10 lines. H F, the side of the truncated cone, is 3 inches 1 line in length. This truncated cone, or the cup, might indeed be made somewhat shorter, without any material disadvantage; but as it contributes to the preservation of the other parts, and facilitates the labour of the artist in joining them together, it will be best to keep to the dimensions as above stated. I shall however shew hereafter, that some advantage also results from this form, in increasing the effect of the sound.

F G is the bottom of the cup, and the principal part of the whole instrument: the utmost attention ought therefore to be employed in its construction. It might be formed according to the segment of a circle, whose radius is 2 inches 7 lines. This was the form at first adopted; but it has been found more advantageous to give this segment the parabolical form, its focus amounting to 1 inch. However, as it is not to be expected that every artist should be able to execute this in a proper manner, I have (in *Figure 2*) delineated the model of the parabolical form adapted for our instrument. When the artist has made his model, he may begin to turn the bottom, (or the proper sound-reflector,) the most important part of the whole instrument. For this purpose he must select a plate of very pure brass, and take the smooth side for the inner surface; for the smoother the reflector is, the more perfect the instrument will be. All possible attention should be paid to this part of the work; and if the artist understands the operation, it will be advantageous to polish the bottom; but in doing this, he must always have his accurately formed model at hand, and endeavour to make it fit exactly at every point. In polishing the bottom, the operation should always be conducted from the circumference towards the centre, and care should be taken never to pass beyond the centre. This bottom is afterwards soldered to the

instrument, when all the other parts have been put together; and for this purpose it should be provided, at the circumference, with a narrow hoop, to clasp over the cup.

We have now to consider the mouth D E, and the conducting tube K L B. The mouth D E is also formed according to the model that has been used for the bottom, and with the same care and attention, but with this difference, that its chord must be four or five lines less than that of the bottom F G. More than this is not necessary; for if it be made larger, the instrument produces a grating and less distinct sound. In the centre of the mouth a perforation is now made 1 inch $2\frac{1}{2}$ lines in diameter. This is also the length of the diameter of the lower extremity of the conducting tube, which is made 5 inches 10 lines long, the diameter at A being 6 lines. When the tube has been formed, it is filled with melted lead, and bent in such a manner, that the diameters at K L and at A form a right angle with each other. The lead is now melted out again, and the tube carefully cleansed and polished; after which the mouth D E is soldered to it. The whole conducting tube is then soldered to the cup at I, (where it has a circular aperture,) in such a manner that all points of the circumference of the mouth D E come to be at equal distances from the sides of the cup, and the plane of its orifice in a perfectly horizontal position, the conducting tube standing perpendicular upon it. The artist must attend particularly to these points, and take care to have the focus of the mouth at precisely the distance of that focus from the focus of the bottom. About an inch from the extremity, a ring is soldered to the tube at A, having an aperture in its periphery. The use of this is, that when the other part of the conducting tube A C is fixed to the instrument, and screwed round, the hook clasps the ring, so as to fasten both pieces together. The hook serves also to increase the friction, so that one is enabled to place the end of the tube that is applied to the ear in whatever position may be most convenient. The tube

tube A B is 9 inches in length ; its diameter is 6 lines at the lower extremity, and 3 at the upper, B, where it is bent, and terminated by a bulb of bone or horn, 1 inch in length, which serves to defend the ear against the irritation that might otherwise be produced by the acrid quality of the metal. Finally, the perforated lid of the cup is fitted on ; and this serves both to keep out the dust, and to prevent the mouth and the conducting tube from being bent out of their proper form.

Fig. 3 represents a section of the lid.

The method of using the instrument is very simple. The cup is held in one hand, the bulb B C applied to the external meatus of the ear, and the whole instrument held parallel with the body, in the same manner as one usually holds a tobacco-pipe. It may also be rested on the table ; nay, I have even heard of a person who made use of this instrument at the chase. For this purpose it is provided with two small hooks, the one upon the cup at M, and the other on the tube at N, whereby it may be fastened with strings to the coat.

All the rays of sound are collected by the cup, (for which purpose it is made of a conical form,) and transmitted to the bottom, where they are united into a focus, and pass forward in a parallel direction through the conducting tube.

I am at present employed upon a similar instrument of a far more commodious construction, but defer saying any thing concerning it, till I shall have made a trial of its effects.

Art. 16. *Description and Engraving of a Chair used in Contractions of the Knee-joint.* By Mr. TRAMPEL, of Pyrmont.

THE following account of the manner of using the chair is given by the inventor in Prof. Arneman's Magazine for Surgery, vol. i. p. 23. (*See the Engraving, page 65.*)

When a case of contraction of the knee-joint is committed to my treatment, he says, whether it arise from the scia-

tica or from an incipient anchylosis, I place the patient in the CHAIR, (provided he be not too young,) after the seton has begun to produce a discharge, in such a manner that the deformed limb comes to lie upon the slanting board *d*, and the contracted knee under the straps *b. b. c. c.* When the limb is in this situation, I lay a flat piece of sponge under the hollow of the knee, and upon the knee itself a compress consisting of several folds, which must be soaked in a decoction of flor. sambuc. and capit. papav. albi. This being done, I draw the straps *b. b. c. c.* as tight upon it as the patient can bear, and even though the pressure should be very sensible, a narrow piece of wood, cut according to the curvature of the knee, must still be laid over the compress, and a water-vessel placed at the end of the slanting board. These preparations being made, I pour slowly upon the knee as much of the above-mentioned decoction, as is sufficient to soak the cushions on both sides of it, and the sponge under it; and this I repeat as often as the compress begins to grow cold, and as long as the patient can bear his situation. In the intervals between the repeated affusions of the decoction, I try whether and how far the joint and its tendons may be stretched out, by pressing with one hand upon the knee, and endeavouring with the other gently to raise the heel: this operation I repeat frequently, and when I find that the parts have yielded a little, I move the wedge *a*, which runs in a groove, as much nearer to the seat *e*, as the yielding of the parts permits, marking the place by means of a wooden peg stuck into one of the holes behind the wedge, that I may begin the next time where I have stopped in the present operation. In this manner the trials must be repeated, till the seat of the chair comes to be in a right line with the upper surface of the wedge. The seat of the chair *e*, is 1 foot 10 inches broad, and 1 foot $9\frac{1}{4}$ inches high. The end of the bench *d*, is 1 foot and 1 inch from the floor; its length is 3 feet $9\frac{1}{2}$ inches, and its breadth $5\frac{1}{2}$ inches.

1800.] *Harrup on the Effects of Light upon mercurial Oxyds.* 69

Art. 17. *Experiments and Observations on the Effects of Light upon mercurial Oxyds, and on Vegetables, &c. &c.* By Mr. HARRUP, of Chobham.

To the Editors of the London Medical Review and Magazine,

GENTLEMEN,

IF you think the following experiments and observations merit a place in your Review and Magazine, by inserting them you will oblige,

Gentlemen, your obedient humble servant,

Chobham, Surry,

ROBERT HARRUP.

Sept. 7, 1800.

SOME time in the beginning of July 1797 twelve grains of calomel were exposed to the rays of the sun on a piece of glass; in a few minutes the surface became of the colour of prepared calamine; the under part remained unchanged till exposed to the light, when it became of the same colour. After mixing the upper and under parts together, it was again exposed; but the light on one part was increased by reflection from a mirror. The surface on that part where stronger light was thrown acquired colour much sooner than the other, and in about half an hour became of a brownish colour inclining to yellow. The other part continued of the calamine colour, although exposed to the rays of the sun for several days. Upon examination, with a common magnifier, the whole surface was found to be covered with mercurial globules; but were more numerous on that part which had been exposed to the stronger light. After long exposure the powder becomes of an ash colour, without any increase of the globules.

Toward the latter end of the same month ten grains of red nitrated quicksilver were exposed to the rays of the sun; in a few hours the colour of the surface was changed to a dirty red inclining to brown; the under parts unchanged. Next day, in the afternoon, the surface was of a deep brown colour.

Two days after, the under part had much the appearance of the red oxyd of lead. In about a month the whole surface was covered with globules of mercury, which could very easily be distinguished by the naked eye. As the air had free access in these experiments, I made the three following, in which it was excluded.

April 1798. Ten grains each of calomel, calcined mercury, and red nitrated mercury, were introduced into three small glass tubes, and the tubes hermetically sealed. They were then placed where the rays of the sun had free access.

The same phenomena took place in the calomel as in the former experiment; the same appearances were also repeated in the red nitrated mercury, and mercurial globules sublimed and adhered to the upper side of the tube.

The inside of the tube which contained the calcined mercury became, in a day or two, of a dull leaden hue. The incrustation was with some difficulty got off by agitating the tube, when it appeared the powder had undergone no change.

After several months exposure, all the tubes on the inside were completely incrustated. That which contained the calomel was of a pale ash colour, that with the other two of a dull leaden. Upon opening them, the colour of the calomel appeared pretty uniform throughout, and by the help of the magnifier numerous mercurial globules were distinguishable. The powder was somewhat pungent to the taste, and left a slight degree of roughness in the mouth. The colour of the red nitrated mercury was a deep brown, that of the calcined mercury two or three shades lighter. The incrustations, which adhered to the tubes pretty strongly, were found to be quicksilver interspersed with small particles of the coloured substances.

Light seems to have no action on muriated, nor on the white calx of mercury. The late Dr. Black, with whom I corresponded on this subject, in a letter dated the 20th October 1797, accounts for this in the following manner: "The reason," says he, "why the light has so little effect on the corrosive

rosive muriate of quicksilver, or on other compounds of that metal with a large proportion of acid, appears to be the superabundance of acid which has also attraction for the oxygen; so that this last is retained and fixed by two attractions, viz. that of the metal and that of the abundant acid: it is therefore the less disposed to join with the particles of light."

Although the effects of light on some of the metallic oxyds and a few other substances have been long known, I believe no experiments have before been made with the mercurial oxyds. It appears from the reduction of the calcined mercury in the above related experiment, that light produces the same effect as a strong heat. Has the light, then, which is present during the reduction of calcined mercury by heat any share in producing that effect?

Of all the various objects of chemical and philosophical research in the present day, that of the effects of light on bodies seems to be the least prosecuted. From the few comparatively trifling experiments which I have made, I am persuaded, that if the subject were pursued by those who have leisure and abilities, some of the most important objects in chemistry, which are at present involved in obscurity, would be greatly elucidated. Nature employs the influence of light in several of her great operations; it is well known, that vegetable life cannot be preserved without its presence. The result of some experiments which I made two years ago on raising plants in a darkened room was the following: They came up at the usual time, were white, or rather of a pale yellow colour; the few leaves put forth were small and did not unfold; the stalks were much smaller than natural, and shot out to a great length. After some time black spots appeared on different parts of them, which kept increasing till the whole plant was consumed as if by a slow combustion. On the supposition that a superabundance of oxygen was the cause of their sickly appearance and decay, several substances were applied to them with the view of attracting it; all of which

which proved ineffectual, excepting fresh-made charcoal in powder. By the frequent application of this substance the leaves expanded, and became of a pale green; but the stalks, although kept in close contact with it, remained unchanged. It is also necessary to remark, that the plants to which the charcoal was applied lived much longer than the others. By some unaccountable oversight, sulphurated kali was not made trial of. What would be its effect, or the effect of the gas which is extracted from it? From some experiments which I lately made, it is more than probable, that the principal source from whence oxygen gas is derived to keep pace with the immense consumption, is from the decomposition of water by the action of the solar light; either when floating in the atmosphere or when in a state of solution in the air.

It is unnecessary to observe, that the glasses in which substances are exposed to the light ought to be thin and very transparent. The best form, for substances in powder, is that of a plano-convex, with a small opening at one side, formed by a short tube for the facility of sealing it hermetically. The substance, when introduced, to be spread on the plane side by gentle shaking. The convexity of the upper side prevents the powder intercepting the rays by subliming. For liquids the glasses should be very flat and broad, so as to present the largest possible surface, and placed in such a manner, that the rays may pass through them. If round or cylindrical glasses are used, many liquids, which become coloured by the action of light, would be changed by very slow degrees: for instance, sulphuric acid, which, by exposure to the light, becomes of so deep a brown, that it is only by being placed between the eye and a very strong light that its colour can be distinguished.

To conclude, I have only to observe, that upon the whole, light, in many instances, has evidently a stronger attraction for oxygen than any other substance with which we are acquainted.

Art. 18. *A Case of obstinate Lues Venerea, attended with uncommon eruptive Appearances.* Communicated by WM. NISBET, M.D. Fellow of the Royal College of Surgeons, Edinburgh.

To the Editors of the London Medical Review and Magazine.

GENTLEMEN,

A NATIVE of the West Indies was ordered to this country for the benefit of his health, and arrived at Edinburgh in the beginning of February 1799.

His complaints were, a general scab and ulceration upon every part of the body, but especially over his face; arising, as was supposed, in consequence of the yellow fever and repeated dysenteric attacks, to which he had been much subjected. Previous, however, to these last complaints, he had had a gonorrhœa and chancres, at the distance of several years; and for these he underwent a long course of mercury, sufficient, in the opinion of his physicians, to extinguish every taint of the venereal virus.

When these ulcerations broke out, his physicians, that no doubt might remain, had recourse again to the same remedy; but instead of curing, it seemed to increase the malady. Some time after the mercury was given up, many of the ulcerations healed of themselves, which seemed to militate against the supposition of its connexion with a venereal cause. The preparation of mercury used, was chiefly the corrosive sublimate solution; a practice much followed by the West India physicians, and carried by them to very great lengths. On his arrival in Edinburgh he came under my care.

From the history of his case I was in much doubt whether the ulcerations could be venereal or not: 1st, from the quantity of mercury said to have been taken by him; 2d, from its bad effects in extending the disease; and 3d, from the ulcerations being so very general, which is almost never found in real venereal cases. Not wishing to trust to my own judgment, I put him under the direction of Dr. William Wright,

a gentleman of known abilities, and of the first experience in West India diseases; who not only thought the case not venereal, but, on the contrary, considered it as a species of the *yaws*. On this supposition he was put on a course of sarsaparilla, which was continued for six weeks, with a sensible amendment of his complaints. After this period they seemed to continue stationary, and it was then suggested to employ an addition of mercury in a saline form. Under this treatment he gradually relapsed; the ulcerations increased in number and size, and he came to London in the beginning of last winter, given over by his physicians in Edinburgh, as labouring under an incurable case of *yaws*. Soon after his arrival he had a consultation with a West India physician, Dr. Hart, who, on being made acquainted with the particulars of his complaint, regarded them as the consequence of too profuse a use of mercury, and as partaking somewhat of a leprous tendency. By him he was ordered the warm bath, antimonial and alterative medicines, and the insertion of an issue. But, not being satisfied with this opinion, I suggested to him the propriety of consulting Mr. Blair, surgeon to the Lock Hospital, whose extensive practice, and superior knowledge, in the treatment of venereal complaints, might determine the real nature of the malady.

Mr. Blair, on examining the case, thought that though the eruptive appearances were not such as are generally met with in venereal cases, there was, nevertheless, some resemblance; and therefore a probability that they might be connected with a venereal origin: besides, he much doubted if the mercurial plan had been properly pursued. In the desperate situation in which the patient then was, he advised that mercurial infusions might be steadily had recourse to, as the most eligible form. Not wishing, however, in such a singular case, to rest solely on his own suggestion, he proposed having the additional advice of Dr. Willan, who was well acquainted with the diseases of the skin, from having made that subject his particular study.

Dr.

Dr. Willan agreed immediately on the propriety of using mercury by friction, as affording the best chance of a cure. To this treatment the only addition I made, was in joining the daily use of five grains of opium, to subdue any symptoms of irritation.

The course was accordingly begun, with two drachms of ointment rubbed in every night, and increased soon to half an ounce. It was continued nearly four months, and not less than fifty ounces of the ointment were employed, with a proportional quantity of opium ! After the first fortnight appearances of amendment took place, and went on progressively till a complete cure was accomplished. Under this treatment the patient daily recovered health, flesh, and spirits, instead of becoming emaciated, weak, and exhausted ; and he returned well to his own country, to the amazement of every practitioner whose care he had been under there, and who had ordered him the voyage to Britain without any hopes of his amendment.

From the above case several important practical facts come to be deduced :

1st, That no confidence is to be placed in the use of the saline preparations of mercury for a permanent cure of a confirmed lues. Hence the folly of having recourse to the different empirical remedies, which contain mercury in this form, blended with a syrup or a vegetable decoction.

2d, That the use of such remedies, by checking the disease in the mean time, and suspending the morbid action, is apt to cause it to assume, on breaking out, a new eruptive or scabby appearance very different from the common lues ; and which cannot fail to deceive practitioners at times, and thus endanger the life of the patient. It is, perhaps, from this frequent use of empirical antivenereal remedies that diseases of the skin are now so frequent.

3d, That mercury, employed liberally in the form of unction, will subdue morbid appearances that resist its action in any

other way of application. Wherever, therefore, mercury aggravates a disease by its exhibition internally, before abandoning the course, its use by unction should always be had recourse to in very bad or desperate cases.

I remain, Gentlemen,

Pickering Place, St. James's,

Your obedient servant,

Oct. 10, 1800.

WILLIAM NISBET.

Art. 19. *Facts relating to the Origin of the Cow-pox.* Communicated by Sir CHRISTOPHER PEGGE, Knight, M. D. and Reader of Anatomy, Oxford.

To the Editors of the London Medical Review and Magazine.

GENTLEMEN,

HAVING communicated the enclosed particulars respecting the cow-pox, in the form annexed, to Dr. Jenner, and having received a letter from him expressing a wish to see it made public, I request that you will oblige me by inserting it in your interesting publication, the *London Medical Review and Magazine.*

I am, Gentlemen,

Oxford,

Your most obedient servant,

Oct. 10, 1800.

CHRISTOPHER PEGGE.

TO DR. JENNER.

DEAR SIR,

I HAVE the honour of transmitting to you a series of facts respecting the cow-pox, which appear to me to be very interesting; and I flatter myself will be the more so to you, as they tend to establish your own opinion as to the origin of that disease.

They have been communicated to me, as they arose, by a friend of mine, Mr. Lupton, of Thame, a surgeon of long experience; and, I do not hesitate to add, a man of the greatest respectability in every point of view. The

The attention of Mr. Lupton was first drawn to the present subject in March last, when the son of Mr. Way, farmer, of Ichford, applied to him on account of a complaint in his hand, attended with ulcerations very much resembling the cow-pox. There was evidently a very great derangement of the system, and the symptoms plainly indicated an absorption of morbid matter, as the case was also attended with considerable swelling of the hand and arm, an enlargement of the axillary glands, rigors, pain in the head and back, together with a greatly increased quickness of the circulation.

He could only account for these complaints from his having washed the ulcerated heels of a horse, having had no previous communication with the cows.

These circumstances led Mr. Lupton to conceive that there might be a disease incident to the horse, analogous to the cow-pox, and communicable to the cow; and, upon repeated inquiry, he was satisfied that it was not the common grease to which horses are liable, that had produced the above effects.

Mr. Lupton was so good as to communicate this information to me at the time, treating it as a matter of curiosity rather than of serious investigation; and I heard no more from him on this subject till the 8th of April, when I received the following letter, which I give you in his own words:

“ DEAR SIR,

“ SINCE my last letter respecting Mr. Way's son, I have had another case of infection communicated to the human subject, owing to matter absorbed from the ulcerated heels of a horse. The person is Richard Hunt, (a servant of Mr. Randolph's, of Thame Park farm,) whose first symptoms were, stiffness and uneasiness of the arm, swelling of the axillary glands, succeeded by pustules on the hand, and a very painful suppuration of the middle finger, which had that blue appearance described by Dr. Jenner as indicating the true vaccine disease: these were accompanied with rigors frequently

quently recurring, attended with great heat, anxiety, giddiness, pain in the head and back, sickness, and vomiting. Such were the appearances when I first saw him, which was on Sunday, March 30th.—On the 31st, he had had a very bad night, and had been slightly delirious; the other arm growing stiff and painful.—April 1st, Was much better in every respect, except the painful state of the finger, and the inflammation of the hand and arm. The course of the lymphatics was at this time beautifully marked with streaks of a vivid red colour, extending from the wrist to the axilla.—April 2d, Continued better.—April 3d, Had a bad night, from the pain of the finger: a puncture was now made, and about two tea-spoonfuls of a dark brown-coloured fluid were discharged —April 4th, The cuticle was now removed, and discovered a shining, red, ulcerated surface, in the middle of which was a spot of a sloughy appearance, of the size of a silver penny; this was covered with the red nitrate of quicksilver: the inflammation, pain, and swelling of the hand and arm were now considerably abated, and in other respects he was much relieved.—6th, The finger much better: the pustules of the hand had a dark-coloured depression in the centre, surrounded with an elevated margin of matter.

“ From this time he had no complaint. It must be particularly remarked that this man has not milked any cow since last Michaelmas.”

“ *Thame, April 8th, 1800.*”

On the 9th of April, a second servant of Mr. Randolph, John Watson, applied to Mr. Lupton, with symptoms similar to those of Richard Hunt, in consequence of having assisted him in dressing the heels of the horse. Watson's proper office and employment in the farm at this time was that of milking the cows.

Previous, however, to the appearance of ulceration upon the man's hands, the cows had been infected more than a week,

week, and there can be no doubt but that the cows had received their infection from the horse through the medium of this servant.

Whether the hands of this man were ulcerated from the immediate effect of the matter received from the heels of the horse, as on that occasion he was assistant only ; or mediately, from its modification in the teats of the cow, may admit of doubt. But, from the fullest investigation, I am persuaded there can be no doubt as to the fact of the matter having been conveyed from the horse's heels to the cows by this last-mentioned servant.

Such was the progress of this history previous to the 18th of May ; when, happening to be at Thame, Mr. Lupton informed me that a third servant of Mr. Randolph (Leonard Paling) was affected in a manner similar to that in which the two former had been attacked. In consequence of this, I had the curiosity to send for him ; and, on examination, we were thoroughly convinced that he had received the infection solely from the cows, as he had never assisted in dressing the heels of the horse.

I found the appearances on his hand exactly corresponding with those already described : I observed one of the axillary glands still enlarged, and very tender ; and, from his own statement, his whole system had been very much disturbed, evidently the effect of the ulceration on his hand.

Thus, dear Sir, we have seen a complete series of facts relative to the progress of this very important disease as affecting the human frame, establishing its origin in a disorder of the horse's heels, by farriers termed a scratchy heel, and considered as widely different from common grease.

The first servant was infected from the horse, the second carried the infection from the horse to the cows, and the third received it solely from the cows.

I have only to add, that from the last servant (Leonard Paling) Mr. Lupton inoculated several children : some of these

I saw on the eighth day after inoculation, with the most decided appearance of true cow-pox upon them. In all these children the disease terminated as usual—favourably. This appearance I could not mistake, after having witnessed so many instances of it at our friend's, Mr. Fermor, of Tusmore; whose benevolent and disinterested exertions have contributed so largely to the stock of facts in support of a discovery which, if the powerful argument of induction may be allowed, bids fair to be of the greatest benefit to mankind.

One circumstance was remarkable in all the three servants above mentioned, viz. that before any absolute ulceration, or even sensation of pain, took place on their hands, they had been previously affected by swellings on the axilla, and other symptoms denoting constitutional disease; and the second servant (Watson) assured me repeatedly that, though both his hands had been ulcerated, a swelling first appeared in the axilla of the left arm, was followed by sickness, headach, &c. after which the ulceration commenced in the palm of the right hand, between the fore-finger and thumb.

As not one of the persons above mentioned have had the small-pox, it is Mr. Lupton's intention to inoculate them as soon as he can find a suitable opportunity: when that occurs you shall be informed of the result.

I have the honour to be, dear Sir,

Oxford,

Your very sincere humble servant,

Oct. 3, 1800.

CHRISTOPHER PEGGE.

Art. 20. *Remarks on cancerous and malignant Ulcers.* By Mr. OLIPHANT, Member of the Royal College of Surgeons in London.

To the Editors of the London Medical Review and Magazine.

GENTLEMEN,

THE following two cases, not common in degree or event, are at your service to insert in the Review, if you think proper.

With

With regard to the cancerous case of Mrs. C...., of Tottenham Court Road, lately given by Dr. Nisbet, I wish it to be entirely considered as his own statement: and to satisfy the numerous inquiries of my friends and others about it, they shall have my opinion through the medium of your Review, in the course of a few weeks; when I likewise shall shew instances of constitutional chronic diseases cured by supervening constitutional acute ones.

March 1st, 1796, J. Burwood, a sailor, and married man, of about 36 years of age, was sent to me from Aldborough, by the Rev. Mr. Thomas Emly, a physician, for assistance in a complaint of his lip and cheek, of several years standing, denominated cancer by those under whose care he had been. The sore of his lip put on the appearance more of a common phlegmonous ulcer than ordinarily occurs in such affections; but the cheek was rather of the yellowish dull red hue, and not in so active a state—constant, as far as I have seen, in herpetic and cancerous ulcerations of the lip, when the cheek becomes implicated in the disease.

The discharge was dreadfully offensive and copious; and on examining into the condition of the mouth, there was found a diseased separation of the canine tooth, the first grinder, and the first incisor of the left superior maxillary bone, which teeth were removed, with their corresponding alveolar processes.

He was ordered to dress the ulcer with a reduced oxygenated ointment and opium, and the swelled cheek to be rubbed with reduced camphorated mercurial ointment: the gums were dressed with brandy, in which a portion of alum was put; his drink in common was to be malt-tea; his food, fresh meat, with a great portion of vegetables. I directed him to take a pill of calomel, extract of hemlock, and tartar emetic, every night for a week, and afterwards twice a-day; presuming that much of the symptoms of irritation would then be removed.

He returned home, but came again, March 10th, with his lip healed, and the cheek considerably reduced in size. There was more maxillary bone found in a state of perfect caries, comprehending the alveolar processes of the remaining molares, which was removed, and a turbinated bone from the nostril of the same side. The disease had reached the cartilaginous portion of the septum nasi, and when the general swelling subsided in this part the bridge of the nose sunk. The discharge being great, thin, and offensive, I ordered an injection into his nose and the cavity of the gum, of compound tincture of benjamin, the yolk of an egg, and lime-water. He then took his journey home.

March 24th, I saw him and removed another incisor, and, I believe, the remaining portion of the maxillary bone, constituting the arch of the palate and the side of the nose. I carried my finger through the separation in the gum into the left nostril, upon the expanded portion of mucous membrane over the palate; in the centre of which there was a small hole communicating between this cavity and the mouth, reaching to the inferior edge of the orbital bone, and backwards the former extent of that bone as far as the dens sapientiæ had been.

His general health being much improved, and the foetor accompanying his presence gone, induced me to add activity to the plan he had been pursuing, by giving a pill of vitriolated mercury, with the antimonial powder and opium, and to drink a decoction of mezereon, woody nightshade, and guaiacum, with a portion of emetic tartar.

This course he continued to the 20th of April, when he visited me quite recovered and perfectly sound. He found much inconvenience from the communication of the cavity in his gum with that of his nose: to speak distinctly, he was obliged to fill the passage in the gum with an adapted piece of sponge; otherwise he snuffled, could not pronounce several words, and gave a dull sound.

He

He went now a voyage to Hudson's Bay, remained well on his return, and for several months after, which was the last time I saw him.

There was not the least apprehension of his case having a venereal source: I was so fully satisfied of this, that my treatment was independent of such a supposition; neither would the trivial mercurial plan under the inclemencies and vicissitudes, as a seafaring man, to which he was exposed, have attained hardly an alteration in a constitutional venereal affection; independent of the disease remaining so long local.

Hearing of the above case, John Bidden, aged 30, of N^o 2 Shepherd Street, May Fair, applied to me March 14, 1800. The history he gave of himself was: at Brighthelmstone, in September 1799, there were many affected with faceach, and a diffused pain in all the teeth; that, on bearing with it, it commonly went off in a fortnight or three weeks. He had a particular pain and soreness in the dens sapientiæ of the left side, in the upper jaw, and which had been drawn adroitly and easily by a gentleman there; the tooth was not decayed, and he still felt his pain. Afterwards there was a considerable exfoliation of the alveolar processes, perfected in eleven weeks, and comprehending three teeth.

During the process of exfoliation, the inside of the opposite cheek was much annoyed by the rugged bone, so as to threaten an ulceration through. To treat this, he was ordered to bathe it with warm sea-water, and had the advice of a physician from London, who ordered the bark, and a wash of myrrh and spirit for the mouth.

He came to town on December 25th following, and lost no time to have the joint advice of the surgeons of a large hospital, who agreed that there was more bone to come away, otherwise they did not see what kept up the ulcer; and prescribed a gargle, &c. for this purpose. The patient differed in opinion from the faculty here, being persuaded there was

no bone diseased ; he lost confidence, but continued the plan a fortnight without amendment.

He now went to a late celebrated surgeon for his assistance, who ordered emollient applications and gargles of the ingredients : next an astringent gargle, which corrugated and healed the sore in the cheek ; but the disease spread more forwards, towards the angle of the mouth. In the progress of treatment a multiplicity of means were employed, the bark internally and externally, and some drops of muriated mercury. He ordered a tooth to be removed : the dentist hesitated, and sent the patient back. The surgeon insisted upon the extraction of the tooth. Though the operator was afraid of the jaw coming away with the tooth in the operation, he extracted it easily, when he laid hold of it, which was a difficult matter, from the tightness of the cheek locking the jaws : the gum presently healed.

The patient saw the surgeon wavering and perplexed when he found the ulceration making rapid strides, which was the hint for him to find other advice.

I now saw him in the highest progress of his disease : the ulcer appeared as if it had destroyed more than half of the lips, the tumefaction of the sore pushing the opposite side away ; the retorted edge of the upper lip nearly touched the nose, the lower the chin ; an erysipelatous mark preceded the spreading of the ulcer. The cheek was hard, swelled, and lurid, and locked the jaws nearly close ; the eyes were full and glassy ; the sore in the edges jagged, and cavernous in the substance, covered with a mucaginous flocculent slough ; very painful, darting forwards to the ulcerating edge, and backwards upon the indurated cheek. He was very languid, worn down by pain, irritation, despondency, and the difficulty of taking food.

I ordered him hemlock, and a small dose of triturated mercury, a decoction of dulcamara and mezereon ; and dressed the sore with æther, spirit, and lime-water, to which some
opium

opium was added. An oxygenated ointment was applied to the edges, and the whole side of the face was closely covered with oiled silk : the diet was milk, broth, and vegetables, abstaining from all vinous liquors.

On the 16th of March 1800, he was desired to drink a pint of strong wort three times a-day, and had a blister applied behind the ear of the same side, to be kept open.

17th, The sore was cleaner in most parts, and to such I continued the dressing; to the foul parts I applied a solution of kali arsenicatum.

18th, The sore was generally promising, and the extended tumour much lessened; I touched some of the edges with lunar caustic, as they were mere skin, the substance being hollowed out. The disease seemed stopt, and the ulcer put on the appearance of a common sore. He had diarrhœa, which was subdued by the extract of poppies, without laying our other plan aside.

On the 19th, his mouth was a little sore. I substituted steel for the mercury; and gave also a good large quantity of the hemlock. I dressed the sore with lime-water and tincture of myrrh.

21st, He was allowed porter, on account of his general weakness, and a portion of animal food. The sore continued looking well, except at its superior remaining angle; and where the herpetic eruption had not been subdued till now, it was stroked with a strong solution of the arsenic. His blister was healed.

On the 27th, Rheumatism seized violently on the knee, which, however, he got rid of in twenty-four hours. The sore being nearly healed, I substituted ointment for watery applications; I trimmed the angular pieces of skin with my scissors, to make the cicatrix more seemly. He was perfectly well April 3d, and went to work; being in the whole twenty-three days, after six months progress of the disease.

Three weeks afterwards, on violently exerting his strength, a
pain

pain seized his testicle, which some years ago had been similarly affected; it passed from one to the other, with no particular affection of the chord. He soon got so much better as to think himself capable of making the tour of Wales; but in the three months suffered repeated attacks of swelling and pain in his testicles. Soon after his return there was a fluctuation and a pointing near the surface, in the upper part of the left; and, when it was expected to break, it subsided, and another part near the bottom rose up: this presently ulcerated and discharged large lumps of cheesy matter and substances like fat. The general pain subsided, and the swelling diminished; but he is now under my care for it, and nearly well.

The pain of the testicle alternated with a supervening tightness on the cicatrized lip, corresponding in degree, but of uncertain continuance in either. This gives reason to infer, that the disease in both was of the same disposition, shewing different phenomena in seats so different; and I am disposed to consider the usually denominated cancer in the lip to be scrofula in the mucous and cellular membrane, muscles, and skin here, which is better understood in the conglobate and conglomerate glands; here no one would mis-call the disease in the testicle, though perhaps the other was mistaken by all.

Such cases are not always fortunate in their termination. T. Jones, of about 40 years of age, from the Isle of Wight, had a chopt lip, and accidentally powdered quick-lime blew on it. The appearance induced the faculty to send him to London. He fell under the care of an eminent surgeon, and it was a sore of a trifling size, but a good deal of hardness and pricking pain surrounded it, and an herpetic rash was all around. He submitted to have the diseased portion removed, which was done, and united well by the hare-lip suture. In a fortnight or so a little of the eruption made its appearance on one side of the united skin; it was rubbed with reduced citrinum ointment, and he was put under an alterative course.

It

It spread, however, ulcerated, and contaminated the maxillary glands: they ulcerated; the parotid and submaxillary glands next were seized, which became a sore; it spread down that side of the neck, and he died, a shocking spectacle, under the unrelenting hands of an empiric.

Perhaps the exhibition of wort may be considered as a trifling medicine in the above treatment: but whoever considers the excessive animalization prevailing in the body of persons who live almost entirely and largely on animal food, as in the cases of a sailor and gentleman's coachman; or the degree of irritating acrimony in the secreted fluids, whether excrementitious or from the surface of an ulcer; will surely endeavour to induce a different disposition, so unfriendly to the process of healing, health, nay, existence of life.

A remarkable effect of wort, in such a case, occurred in a gentleman's servant, of middle age, in the hospital his master sent him to, after private treatment at home had failed.

He was attacked with pain in three of his fingers, which began to look livid; and when he came to the hospital, one phalanx of the middle finger was sphacelated, and another gangrened: the first phalanx of the ring and fore finger gangrened, and an erysipelatous inflammation, with much pain and swelling, extended over the whole hand.

Under our care he had a fomentation of poppies, and poultice of the liquor, with fermenting poultice, and that of carrots: he took bark, opium, volatile alkali, and antispasmodics; he drank wine and porter, and was otherwise well fed. All availed nothing: his pain continued, and the disease advanced; so that four phalanxes were destroyed. The surgeons admitted the use of wort, which was drank in large libations; and in the course of twenty-four hours the pain lessened, the swelling diminished, and a stop was put to the spreading. A short time after, marks of separation ensued, true phlegmonous inflammation came on the sound portions,

portions, and he came off with only the loss that had been confirmed under the former plans.

I am, Gentlemen,

Percy Street,
Oct. 20, 1800.

Your humble servant,
ISAAC OLIPHANT.

Art. 21. *Remarks on the most approved modern Practice in the Treatment of cancerous Complaints.* By WILLIAM NISBET, M. D. Fellow of the Royal College of Surgeons, Edinburgh.

To the Editors of the London Medical Review and Magazine.

GENTLEMEN,

IN your last Number but one, you did me the favour of inserting a remarkable case of the cure of cancer. I there asserted that the treatment proceeded on a new and different principle from what had been attempted. Before proceeding to any further detail of it, as I then promised, or producing additional facts in its support, I shall first state some objections to what is considered at present as the most approved modern treatment in such complaints.

If we examine the latest writers on the subject of cancerous complaints, their treatment may be reduced to two simple points, the use of topical bleeding in the early stage, and extirpation when more advanced, conducted so as to heal by the first intention.

With respect to the former means, scirrhus, it is to be always held in view, is a chronic disease, and a disease also of the smaller or lymphatic series of vessels. Blood-letting, therefore, in any form, is not suited to this species of inflammation. Every symptom shews a deficient action of vessels, and an altered organization, connected with this passive state. From the perusal of some popular works, a good many years ago, I was strongly prejudiced, like many others, in favour of this remedy, and the idea of the carcinomatous inflammation pointed

pointed out by these writers was at least specious. I gave it, therefore, a full and fair trial; but, after much experience, so little success in most cases attended the application, that an increase of pain was constantly complained of immediately after their renewal, independent of the local effects which the bite or wound occasioned—a circumstance by no means to be disregarded.

In a late publication on this subject I have endeavoured to prove, from the symptoms of the disease, from the appearances on dissection, and from the period of life at which the attacks of this malady are most frequent, that a tendency to obliteration of this part of the system, the seat of it, the effect of atony or impaired excitement, takes place. Hence this very state, it is evident, must be more confirmed by such means of cure. The inflammation also that attends this disease, besides being deficient, is always of the erysipelatous kind; and practitioners, in directing bleeding here, abandon those very principles which guide them in other cases marked by the same species of inflammation. Besides, it can only be considered as a palliative remedy in the most favourable view that can be taken of its application; and even were it to give relief, it is only amusing the patient, without any step towards a permanent removal of the complaint.

Is any permanent relief obtained from the different hæmorrhages that arise in the progress of the disease, and these often at a very early stage of it?

If the positions insisted on in regard to the nature of the disease, and the state of that part of the system which forms the seat of it, and which I have considered at large in a separate work, militate strongly against bleeding, they will militate equally so against the operation: and both facts and reasoning give additional strength to this opinion.

With respect to the former, the progress of extirpation is chiefly supported by the far-famed cases of Mr. Hill; but it is little to the credit of modern surgeons that these cases

should form the chief evidence in its favour. Mr. Hill's practice was confined to an obscure part of the country, and the disease during his time was by no means so well understood as at present, nor the distinction between scrofulous tumours and real scirrhus then pointed out, as has been since done by the labours of Mr. Hunter, Mr. Pearson, and others.

In deciding the question, then, the opposite opinions of both the late Dr. Monro and Mr. Hill, so frequently quoted by each party, should in modern practice be laid aside. The point shortly is, will the records of the different hospitals since their time sanction extirpation as a certain and permanent cure for the disease? and has the experience of any surgeon gone so far as fully to determine it, seeing the opportunities of proof cannot fail to have been so ample? By one author, who from his own account has had the fullest means of investigation, it is decided against extirpation; and as far as my own individual experience extends, which has not been small, I have no hesitation in confirming the same opinion. But though Mr. Hill's operation might have had a success independent of his mistaking the disease, we can easily account for it at that period when we compare the difference in point of frequency between the appearance of cancer then and at the present day.

Cancer, about a hundred years ago, when speaking comparatively, was a rare disease. It continued long in the scirrhous state, and many years intervened before the fatal termination took place. Cancer now is one of the most frequent diseases met with; it passes rapidly through its different stages, and often terminates fatally in the course of a few months.

The constitution therefore at the former period must have differed materially from the constitution of the present day; and the extirpation of the part might succeed at that time, when it only produces an aggravated return of the affection now.

The

The causes of this state I have endeavoured to detail elsewhere, and have therefore only hinted at them here.

So standing the matter of fact with respect to the success of the operation, let us next examine its propriety on the ground of theory or reasoning. It is clear, that no operation, however extensive, can remove all that part of the lymphatic system connected with the seat of the disease. What is removed then constitutes a loss of part of this system, viewed as one whole, connected together in its several parts; and these parts or divisions again depending upon or influencing each other. By the loss then of this extirpated portion, the remaining contiguous branches will be rendered imperfect in their circulation, in proportion to this loss. Hence, instead of the operation proving a cure, a new cause arises to favour obstruction, increasing the original predisposition or general atonic state; and a return, therefore, of the former affection is generally a consequence within the twelvemonth, as every practitioner of experience well knows. Nay, this return, I am persuaded, will become more speedy when the healing of the part is effected by adhesion. The natural termination of wide glandular swellings we find to be suppuration. When this process ensues, a favourable termination in all external cases happens. Hence this effort of nature ought, for the most part, to be imitated. It may be considered as the powers of the constitution aroused to attack a part for the purpose of removing disease; and by such an effort the morbid cause is, even in the present instance, less apt to return. Thus, in the case of venereal bubo, we find that a confirmed lues seldom follows its coming to suppuration: the virus seems arrested by the inguinal glands in its progress, and the powers of the system are, as it were, exerted to throw off, in this stage, the noxious cause. In the healing then by adhesion, its future consequences are overlooked, in the case of recovery; for wherever adhesive inflammation occurs, it must be attended more or less with an occlusion of vessels, and a shrinking of
M 2 substance;

substance; the very circumstance that constitutes in part the present disease. Any small portions, too, of the scirrhus affection, which the operator may have overlooked, and which in the end have passed off by suppuration, are by this mode of healing retained, and have not even a chance of melting away. To this may be added, the very circumscribed nature of the operation, considered as a general remedy, and the very few situations of the disease to which it properly applies.

But where the operation is not admissible, the use of narcotics has been long a popular practice. With respect to their exhibition here, whether in the form of the cicuta, belladonna, aconite, or any other article of this numerous tribe, I have uniformly found them fail in the cure of cancer, in every stage of its progress; and not only fail, but sensibly do harm. Whoever prescribes narcotics in cancer, I am convinced, is unacquainted with the real specific nature of the malady, as, from their natural mode of operation, every symptom of it must be increased, and that in proportion to the extent of their dose. The subsiding of pain and irritation, which they occasionally produce, is bought at the expense of the constitution, and the short-lived moments of ease strengthen more powerfully the cause of the affection, or extend the scirrhus state, and accelerate its progress. I am, therefore, surprised to find, with their baneful effects on the constitution before the eyes of every practitioner, nay, with a conviction of their total inefficacy as to a cure, they should still continue to be prescribed. That in scrofulous tumours they have occasionally done service, I most readily admit; but their effects in scirrhus are completely the reverse; and the distinction between the two diseases is now well understood. Wherever a narcotic is necessary, experience will uniformly shew that none is to be preferred to opium, and that its powers are capable of giving that temporary relief, which is all that can be expected from medicines of this class, without any of the alarming symptoms produced by many others.

In concluding these cursory hints, what I wish particularly to inculcate, is, that the constitution has a power in cancer of rectifying and preserving itself, when properly raised and directed for this purpose, and that the means lie more in fully understanding and regulating this principle than in the particular substances employed. Principles, however, are too much abandoned for the application of some trifling remedy, and the ease of the practitioner is consulted at the expense of his science and investigation, by holding up the infallibility of a particular form.

I am, Gentlemen,

Pickering Place, St. James's,

Your obedient servant,

Oct. 16, 1800.

WILLIAM NISBET.

Art. 22. *A Case of Hydrocephalus, with Observations.* By Mr.
CHARLES PEARS.

To the Editors of the London Medical Review and Magazine.

GENTLEMEN,

SHOULD you think proper to honour the following with a place in your useful publication, I shall beg to submit it with the same deference that accompanied the former cases* you were pleased to favour with your acceptance. This is

A remarkable Case of Hydrocephalus, with Observations.

As any disease that frequently occurs, without being so far understood as to facilitate the means of cure, must be deserving of attention from every practitioner, a remarkable instance of hydrocephalus has a claim to our notice; and when the symptoms are indubitably marked, and the adopted means found efficacious in proportion to their extent, we are fully warranted in drawing a favourable conclusion.

* Respecting that of Colera Morbus (in your Number for July 1799) may I be permitted to mention the complete success that has this year attended the treatment recommended?

So

So many children are attacked by this complaint, which almost as frequently proves fatal, that the very suspicion of its existence generally induces the idea of a hopeless termination; and so great is its obscurity, that it has been asserted by medical authority, supposed to rank high, that “there is more merit in discovering this case than in curing it.” If, however, there be more merit in the discovery than the cure of this disease, we have very little to boast on the part of an able practitioner who should be able to detect it. How much are we obliged to those who make such an assertion, and thus endeavour to improve medicine!

Of the many theories that have prevailed as to the cause and nature of this disease, each has had its day, its admirers, and refutation; while we are still left either to kill *secundum artem*, or to rest on the basis of our observation and experience. As the latter is the only sure mode to ascertain facts, every opportunity should be duly regarded and improved; and as what has occurred to one may be made beneficial to others, by the means of any useful medium of intercourse, the faithful recital of *real cases* may prove of the most lasting importance.—With this view the following is submitted; from the circumstances being peculiar in themselves, so far as they relate to the case, and the success of the treatment, for the time employed.

On September 25th, 1798, I was desired to see John V—, aged 11 months. His head was very much enlarged, with that peculiar characteristic countenance which leaves no doubt of its indication; a flattened face, square forehead, with the wrinkled appearance of age and anxiety visibly expressed, &c. I was informed, upon inquiry, that his mother had bred with dropsy, and was relieved of a quantity of fluid, supposed to equal two gallons, at the time of parturition. The head of the child was found to be enlarged at the time of his birth, but he continued in apparent good health for seven weeks. He then had the small-pox, but without any eruption on the head or shoulders.

shoulders *. After this the head enlarged much, and the child became unusually cross, with symptoms of general irritation, and starting or jumping at any sudden or unusual noise. He was then placed under the treatment of a Mr. C—, and became much emaciated under a medical course of three weeks, during which time the ung. hydrargyri was applied on the head, which increased in size more than it ever had done, either before or since †; and for three weeks afterwards the frontal suture would receive a finger in its depression. The emaciation then ceased, and the child remained in a stationary state until July following. Since that time the head has enlarged progressively, and felt extremely hot; with general fever, flushings in the face, &c.; the pulse was now quick and small; the appetite good, a pint of milk containing three spoonfuls of flour being taken during the day, and in the night the child was suckled. The sleep is disturbed by startings, &c. and has been so ever since the small-pox, so that the child has not one hour's continued sleep during the night, but is awaked by the least noise. The ear discharges a yellow pus, variable in quantity. The mobility of the bones of the head is very apparent, and a distinct fluctuation felt under the finger when applied at the os frontis. It is also perceivable on any unusual motion of the head, particularly on laying it backward; which appears to be attended with a sensation of weight, and a necessity for support or rest from behind; so that the hand or a pillow is generally required to be placed at the occiput.

Being thus certified of the disease, the intentions were *to evacuate the water* by absorption, evacuants, &c. and *to sup-*

* Can this exemption be explained upon any principle? or could the disease occasion this peculiarity?

† That this effect was produced by the action of hydrarg. and not from any imprudent exposure during its administration, was ascertained by investigation; also the possibility of such an effect being produced by cold, acting on the preparations of hydrarg. is now much doubted.

port the general habit by tonics, food, air, &c. With this view, I ordered a generous diet, with wine and water, air, exercise, frictions, &c.; and fomentations of vinegar and water applied on various parts of the body; with a blister to the neck, and the following medicine:

R Pulv. rhæi gr iij, Pulv. gentianæ gr vj. M. Div. in pulv. iij. A powder to be taken three times a-day, and a grain of calomel added to one of them.

September 26th, The blister arose and broke in two hours and a half, affording a cupful (equal to ℥iv) of serous discharge. The child was much easier, and the head certainly appeared to be lessened. Much perspiration was also thrown off by the skin; and the ear discharged a yellow purulent fluid, in greater quantity than usual. The irritability or susceptibility from noise was lessened; as also the appetite, and a much better night followed, with less interruption than had been experienced for many months; the intervals of sleep being longer, and less disturbed*. The quantity of gentian was increased as the stomach allowed, and that of the calomel regulated according to the state of the bowels.

27th, Much better; the appetite also; more composed; less starting, &c.

28th, Good night; eats well; more lively. The head measured half an inch less.

October 3d, The child's face less characteristic of the complaint; starts less; sleeps during the night; the natural actions are stronger, and the child can lay his head down, and bear on the occiput, which he always tried to avoid before. A tooth had been cut; an increase of flesh; the fontanelles were four inches distant.

8th, Looks better; no starting; sleeps during the night; good appetite; two or three evacuations daily; no rolling of the head, from that general uneasiness which had prevailed.

* His nights were generally better since the small-pox.

13th, Stretches himself out with more strength; more flesh and spirits: a pint and a half of bread and milk is eaten during the day: the blister continues to discharge well.

18th, Much increase of flesh, giving a degree of rotundity to the before emaciated abdomen. A disposition to convulsion appearing, the semicupium was ordered, and with effect.

25th, All his caps, being now too large, were made less by three inches. Able to lay his head back without any apparent uneasiness.

27th, Not disturbed during the night: more lively in the day; and, when lying, he is quiet, easy, and comfortable, without any appearance of pain, &c. One evacuation daily.

31st, The fits prevailing, I repeated the semicupium. Much flesh acquired, and the head much smaller. The two incisors were cut.

November 2d, I took the measurement of several parts, viz. Round the occiput and forehead, laterally, almost 19 inches.

The carpus	—	was	3
tarsus	—	—	4
Diameter of the great fontanel	—		3 $\frac{1}{2}$

The os frontis was now closed, but the sagittal suture would receive the finger between the parietals.

4th, Much debility prevailing, with loss of appetite, spirits, &c. I gave a third part of the following mixture with every powder:

R Tinct. aromat. 3j, Sp. vol. aromat. gr xxx, Aq. menth. pip. 3jß, Syr. pap. albi 3ij. M.

The symptoms continued to increase, until they resisted medicine; and on the 6th the child died.

This case being so strongly marked, and the extent of the disease so great, I was desirous of ascertaining the quantity of fluid contained, with the size of the ventricles, &c.; and, having obtained permission, on the 8th instant I opened the head, accompanied by Mr. John Cooper, a very ingenious medical friend. After separating the scalp from the cranium,

and exposing the great fontanel, I measured its size, and found it to be two inches across each way; rather exceeding that distance in the lateral direction. The brain was firm, but white, with a sameness of appearance in the cortical and medullary parts. The ventricles were so much enlarged as to contain more than *half a pint* of water by measure in each; and, when empty, I could introduce and turn my hand, in a folded or double form. The water was clear, and without smell. All the joints were much enlarged; and though the bones were very slightly covered with flesh, yet the body was nearly half as fat again as it had been when the treatment was begun, (Sept. 25.)

The recital of this case evinces its peculiarity and its extent, although the time of its continuance was comparatively short. The treatment merely consisted in the daily exhibition of calomel in small doses, accompanied with a generous diet, air, exercise, friction, &c. therein opposing the fallacious idea of an inflammatory diathesis, (*Might not an inflammatory state have existed at the beginning?*) or the need of an antiphlogistic regimen. Where such an excess of debility prevails, as in all complaints of this kind, it is matter of much surprise that a practice should have been employed which is so contrary to fact and daily experience. In all such cases it is certainly needful and of the highest importance to support the patient's general strength, while the disease is acted upon by proper remedies; and in the present case, where the desired effects were so evident and speedy, it is not hazardous to prognosticate the favourable termination so much desired, had it been earlier begun, or not prevented in its continuance.

The great importance of obtaining matters of fact is sufficiently obvious; but common cases are too often neglected from the very circumstance of their frequency: hence we lose all that practical information which would arise from the knowledge of those varieties occurring under the action of different remedies, peculiarity of habit, treatment, &c. In this

this view the necessity of morbid dissections must evidently appear, and the great advantage thence derived of making the dead of service to the living; an idea consolatory and soothing to every humane mind.

Supposing that the extraordinary nature of the above case, where so large a quantity as more than a *pint* of water* was contained in the head of a child not thirteen months old, and the efficacy of the tonic treatment employed, would apologize for the recital; I have only to solicit your pardon for the hasty arrangement of the particulars enumerated, and remain, with the greatest respect, Gentlemen,

Rockingham Row,

Your obliged servant,

Oct. 16, 1800.

CHARLES PEARS.

Art. 23. *Notice of an intended annual Publication on new chirurgical Instruments.* By Mr. SAVIGNY, of London.

To the Editors of the London Medical Review and Magazine.

GENTLEMEN,

IN consequence of numerous applications from various parts of the country, expressing their wish that the several inventions and improvements in surgical instruments, announced at different times in your widely-circulated publication, should be more accurately represented and explained; and having already submitted a work of this description to the public, wherein, as far as the extension of its date, these important articles have been delineated, and which has been honoured with an approbation most highly flattering; I beg leave to inform the faculty in general, that it is my intention to publish annually, in the month of February, (if the supply of materials permit,)

* The author seems to be surprised at the bulk of this child's head, and the quantity of water contained in it. We are acquainted with the case of a child now living, in Lamb's Conduit Passage, Red Lion Square, whose head is thirty-seven inches in circumference. EDITORS.

engravings of all instruments of merit and public approbation that may have been invented or improved, up to the conclusion of the preceding year; and that the communications of those gentlemen who may be disposed to stamp a value upon this design, by the insertion of their respective productions, will be gratefully considered, and duly attended to, by,

Gentlemen,

King Street, Covent Garden,

Your obedient humble servant,

Oct. 22, 1800.

JOHN SAVIGNY.

P. S. As it is impossible, at this period, to ascertain the number of plates and quantity of letter-press which may become requisite in the prosecution of this work, the terms on which it can be offered must remain undecided till nearer to its completion.

Art. 24. *Copy of a Letter on the Cow-pox, from Dr. MARSHALL to Mr. RING, dated at Gibraltar, August 23d, 1800.*

MY DEAR SIR,

I MAKE no doubt of the satisfaction you will feel when I inform you of the very polite reception and great attention we have met with from the governor, General O'Hara; who interests himself much in the success of that great discovery of which we are the missionaries, and set the example to the garrison, by having his own infant inoculated. We have since inoculated the soldiers of the garrison and their children, who have not had the small-pox; and to-morrow we expect to sail for Minorca, with recommendations to inoculate the English army now lying there.

From the medical men here we have met with the most liberal and polite attention; and I am further happy to add, that all are equally convinced of the efficacy of the cow-pox in resisting the small-pox, and of the great reward due to our friend

friend Dr. Jenner, for the benefit he has conferred upon society, and the world at large, by his investigation of this so peculiarly mild and safe disease.

In this warm, and, in comparison with England, hot climate, we have not observed any dissimilarity of symptoms in the progress of the disease, from what is usual in England.

The Governor has applied to the court of Madrid, to obtain liberty for us to go there to inoculate; and it is probable, that, upon our return to England, we may stop there a short time.

Some of the matter we used for inoculation here was what you obligingly furnished me with; and we find it perfectly efficacious, although no precaution had been used as to the preserving it, more than putting it into a small phial.

I shall, from Minorca, send you the result of our inoculation; though I have no doubt of its proving as successful as it has done here.

Dr. Walker begs to present, with me, our joint respects and good wishes, Believe me ever

Your obliged friend,

J. H. MARSHALL.

Art. 25. *A Case of partial Paralysis and Loss of Vision, occasioned by a Blow upon the superciliary Ridge of the frontal Bone.*
By Mr. BLAIR, Surgeon of the Lock Hospital and Asylum, and of the Finsbury Dispensary, &c.

To the Editors of the London Medical Review and Magazine.

GENTLEMEN,

ON the 5th of September last, Elizabeth Kemp, 11 years of age, fell upon the edge of the stairs, and received a blow on the right superciliary arch of the frontal bone. She instantly became blind of the right eye; and applied to me, on the same day, at the Finsbury Dispensary. On examining the patient, I perceived no other sign of injury than a falling down of the upper

upper eyelid ; which proved to be a temporary paralytic affection, arising perhaps from the blow being received upon a twig of the ophthalmic branch of the fifth pair of nerves, as it passes out of the orbit. There was not the smallest degree of inflammation, nor any mark of bruise upon the eye ; and, on exposing the organ alternately to a strong light, after being closed, I was surprised to find as complete a contraction of the iris as in the left eye. This was not to have been expected *a priori* ; for I think it is the same nerve, or a branch of the third pair, connected with it, which supplies the iris and the eyelid.

I directed a blister to be applied upon the right temple ; and one drop of the vinous tincture of opium to be put into the eye, night and morning. No good effect seemed to be produced for about a week ; but, on the ninth day after the accident, the patient had nearly recovered her sight, and could open the eyelid tolerably well. In two days more she was perfectly restored, and discontinued the tincture of opium, which gave her considerable pain. When she first came to me, there was such a total blindness of the eye affected, that the girl could not discern with it any object whatever ; but when I last saw her, she could read the smallest print, her left eye being covered with my hand.

Great Russel Street, Bloomsbury,

Oct. 20, 1800.

I am, &c. &c.

WM. BLAIR.

Art. 26. *Strictures on the various Modes of inducing premature Labour.* By an anonymous Correspondent. *With Observations by the EDITORS.*

To the Editors of the London Medical Review and Magazine.

GENTLEMEN,

I HAVE lately read, not without considerable uneasiness, a good deal in your valuable publication on the various modes of bringing on premature labour. In your last Number but one,
a gen-

a gentleman, who by the signature he adopts is evidently a young practitioner, appears desirous of provoking a controversy on this subject, and throws down his gauntlet as if courting some adversary. Now, Gentlemen, it appears to me, that diffusing such information is precisely the same, as to permit arsenic to be sold by that name, in every druggist's shop. It is, indeed, a piece of knowledge that no professor of the obstetric art should be ignorant of. But it is one of those *esoteric* doctrines that should only be made known to the initiated; and I doubt even, whether it should be communicated to a pupil till the end of his novitiate. But to bandy about doctrines which are capable of such pernicious application, in a journal that may fall into the hands of any persons, is, to say the least of it, highly imprudent; especially in a great town like this, where, to the disgrace of the police, we see daily advertisements in the papers offering accommodations for concealed pregnancy, with security that the parent shall never be troubled with her offspring. This has always appeared to me tantamount to advertising infanticide; and I dare say, if the secrets of these dens were investigated, many a foul and midnight deed would come to light.

I recollect being present at a trial for poisoning, when a weak medical brother, on being asked what substance the person was poisoned with, began, in order to display his professional learning, a dissertation on the various kinds of poisons; but the judge, with a presence of mind that in my opinion did him great honour, interrupted the witness, by telling him that there was only one poison, which was arsenic, and that it could never be used without being detected—well aware of the danger of arming the hands of the vulgar with such mischievous edge-tools.

In like manner, it ought to be publicly inculcated, that no woman can get rid of her burden by any means which do not at the same time endanger her own life. And, notwithstanding your correspondent's assertions of the safety and

ease of this operation, I think this statement is nearly true. Nature has been so careful to secure the safety of the nascent embryo, that she has in a great measure identified its existence with that of its parent. In all such cases it should be remembered that the offspring cannot be destroyed without risking the life of the mother; and every man should have this truth strongly impressed upon his mind, before he proceeds to endanger either. But it is the moral, not the medical, consequences of the position which I object to.

I have always admired the humanity as well as the morality of the following passage of Ovid, and would recommend a perusal of it, especially to the younger practitioner in man-midwifery, before he proceeds "*effodere subjectis viscera telis*:" where they will also perceive that this practice is no new discovery:—

——"*Sine crescere nata.*

*Est pretium parvæ non leve vita moræ,
Vestra quid effoditis subjectis viscera telis;
Et nondum natis dura venena datis, &c.
Hoc neque in Armeniis tigres fecere latebris;
Perdere nec fœtus ausa læna suos.
At teneræ faciunt, sed non impune, puellæ,
Sæpe, suas utero quæ necat, ipsa perit.
Ipsa perit, ferturque toro resoluta capillos:
Et clamant, Merito, qui modo cunque vident."*

OBSTETRICUS EMERITUS.

Observations by the Editors.

ALTHOUGH we very much respect the intention of the writer, yet, as the cases in which this artificial mode of delivery is resorted to are unfortunately of frequent occurrence, and as it may in some cases of obvious deformity even supersede the necessity of performing the Cæsarean operation, we think it has too many advantages to balance the possible mischievous use it may be applied to, by profligate and bad people, to allow of its being totally suppressed or concealed.

Art.

Art. 27. *Notice of a Patent Spring Truss, to be used without Straps.* Invented by Messieurs EGG and WALKER.

To the Editors of the London Medical Review and Magazine.

GENTLEMEN,

THE inconvenience and uncertainty of the trusses in common use for the relief of ruptures, and the uneasiness arising from the straps which are necessary to retain them in their proper situation, have led us to apply a discovery of a mode of bending tempered steel without heat; for which we have obtained a patent, and by which we are enabled to employ a spring much stronger, and more effectual in the construction, than has ever before been employed. The strength of the spring makes them keep their situation perfectly without any strap whatever, while, being made more exactly to fit the shape of the body than they possibly could be with a weaker spring, they are far more easy to wear, and less liable to excoriate the skin.

The advantage arising from this circumstance is peculiarly felt in navel trusses, where the combination of a strong and an exact correspondence of the curve to the form of the body is of the greatest consequence.

Having already obtained the approbation of several eminent surgeons, we take the liberty of requesting the attention of others through the medium of your valuable publication; being fully confident the invention will bear the strictest examination, and be of great benefit to those who labour under any species of hernia.

We are, Gentlemen,

With great respect,

Your most obedient servants,

No. 59, Frith Street, Soho,

EGG and WALKER.

Oct. 16, 1800.

Art. 28. *Monthly Catalogue of new and intended Publications.*

NEW BRITISH PUBLICATIONS.

1. **A** TREATISE on Febrile Diseases; including intermitting, remitting, and continued Fevers, eruptive Fevers, Inflammations, Hemorrhages, and the Profluvia; in which an Attempt is made to present, at one View, whatever, in the present State of Medicine, it is requisite for the Physician to know, respecting the Symptoms, Causes, and Cure, of those Diseases. By A. PHILLIPS WILSON, M. D. F. R. S. Ed. Fellow of the Royal College of Physicians, Edinburgh, &c. Vol. II. Octavo. London, Cadell and Davies. 1800. Price 9s.

2. A second Essay on Burns; in which an Attempt is made to refute the Opinions of Mr. Earle and Sir W. Farquhar, lately advanced; on the supposed Benefit of the Application of Ice in such Accidents, &c. By EDWARD KENTISH. Octavo. 117 pages. London, Newman. 1800. Price 3s.

3. Outlines of a Plan for the Regulation of the surgical Department of the Royal Infirmary. Submitted to the Consideration of the Managers of that Institution. By JOHN THOMSON, Fellow of the Royal College of Surgeons, Edinburgh. Octavo. 14 pages. Printed by Stewart, of Edinburgh. 1800.

4. Chymical Experiments on the Barnet Well Water. By the Rev. WILLIAM MARTIN TRINDER, M. D. Octavo. 14 pages. London, Robinsons. 1800. Price 6d.

5. The Hospital Pupil's Guide through London, in a Series of Letters; from a PUPIL at St. Thomas's Hospital to his Friend in the Country; recommending the best Manner of a Pupils employing his Time, and interspersed with amusing Anecdotes relative to the History and Economy of Hospital's. Octavo. 75 pages. London, West and Hughes. 1800. Price 2s.

6. The Hospital Pupil; or, an Essay intended to facilitate the Study of Medicine and Surgery: in four Letters. By
JAMES

JAMES PARKINSON. Duodecimo. 159 pages. London, Symonds. 1800. Price 3s. 6d.

7. Medical Jurisprudence. On Madness. By JOHN JOHNSTONE, M.D. Octavo. 48 pages. London, Johnson, 1800. Price 2s.

8. Comparative View of the Theories and Practice of Drs. Cullen, Brown, and Darwin, in the Treatment of Fever, and of acute Rheumatism. By HENRIQUE XAVIER BAETA, M.D. Octavo. 55 pages. London, Johnson. 1800. Price 1s. 6d.

9. An Essay on the general Study of experimental Philosophy, and the Utility of Chemistry: introductory to a Course of Lectures on the Philosophy of Chemistry, and the Connexion of that Science with the Arts and the other Sciences. By ANTHONY TODD THOMPSON, Surgeon, Honorary Member, and late President, of the Royal Physical Society, and Member of the Medical and Speculative Societies of Edinburgh. Octavo. 55 pages. 1800.

10. Communications respecting the external and internal Use of nitrous Acid; demonstrating its Efficacy in every Form of Venereal Disease, and extending its Use to other Complaints: with original Facts, and a preliminary Discourse, by the Editor, THOMAS BEDDOES, M.D. Octavo. 188 pages. London, Johnson. 1800. Price 4s.

11. A conscious View of Circumstances and Proceedings respecting vaccine Inoculation, &c. Octavo. 76 pages. London, Hurst. 1800. Price 2s.

12. A concise View of all the most important Facts which have hitherto appeared concerning the Cow-pox. By C. R. AIKIN, Member of the Royal College of Surgeons in London. Octavo. 102 pages. London, Phillips. 1800.

13. A comparative Statement of Facts and Observations relative to the Cow-pox; published by Drs. JENNER and WOODVILLE. Quarto. 43 pages. London, Hurst. 1800. Price 5s.

14. A Treatise on Ophthalmy, and those Diseases which

are induced by Inflammations of the Eyes, with new Methods of Cure. Part the First. By EDWARD MOORE NOBLE, Surgeon. Octavo. 144 pages. London, Robinsons. 1800.

15. A practical Treatise on the Efficacy of Stizolobium, or Cowhage, (the *Dolichos Pruriens* of Linnæus,) internally administered, in Diseases occasioned by Worms. To which are added, Observations on other Anthelmintics of the West Indies. By WILLIAM CHAMBERLAINE, Surgeon, Fellow of the Medical Society of London. Octavo. 90 pages. London, printed for the Author, No. 29, Aylesbury Street, Clerkenwell.

NEW FOREIGN PUBLICATIONS.

16. The Royal Society of Upsal has published the sixth Volume of its Transactions.

17. The third Volume of the new Transactions of the Royal Society of Bohemia has also appeared.

18. The Medical Society of Emulation at Paris has produced a second Volume of Memoirs, illustrated by Engravings.

19. The Society of Natural History at Paris has likewise published a Volume of its Memoirs.

20. JOH. GOTT. LEIDENFROST, Med. Doctoris ejusdemque in Academia Duisburgensi Professoris, Primarii Berolinensis Academiæ Regiæ Scient. et Liter. Sodalis, Opuscula physico-chemica et medica, ante hac seorsim edita, nunc post ejus Obitum collecta. Vol. IV. Lemgoviæ. 1799. Imported by Geisweiler.

21. Dissertatio inauguralis medica de Organorum Corporis humani, tam Energia seu Activitate interna, quam cum Organis sociis Connexione seu Sympathia, quam eruditorum Examini subjecit Auctor DAVID VEIT. Halle. 1798. Imported by Geisweiler.

22. Disquisitio systematica Muscorum frondosorum Sueciæ, adjectis Descriptionibus et Iconibus novarum Specierum. Octavo. Strasburg. Koenig. (The celebrated Naturalist SWARTZ is the author of this work.) Imported by Geisweiler.

23. HENRICI AUGUSTI WRISBERGII, Doct. Med. et Anat. Prof. in Univ. Litt. Georgia Aug. Commentationum medici, physiologici, anatomici, et obstetrici Argumenti, Societati Reg. Scient. Göttingen. oblatarum et editarum. Volumen primum, cum iconibus. Octavo. 572 pages. Göttingæ. 1800. Imported by Geisweiler. Price 17s. 6d.

24. Commentatio de Uteri Degeneratione. Auctore A. SCHWARY, M.D. Ac Tab. II. Hannoveræ. 1799. Price 2s. 6d. Imported by Geisweiler.

25. De Morbis Ligamentorum, ex Materiei Animalis Mixtura et Structura mutata cognoscendis. Auctore G. GÖTY. Icones II. Berolini. 1799. Price 5s. 6d. Imported by Geisweiler.

26. Commentatio de Liquoris Amnii asperæ Arteriæ Fœtuum humanorum Natura et Usu ejusque in Asphyxiam Neonatorum et Medicinam forensem Influxu. Hafniæ. 1799. Price 2s. 6d. Imported by Geisweiler.

27. BURSERII Institutiones Medicinæ practicæ. 4 vols. Octavo. Edit. nov. Lip. 1798. Price 1l. 5s. Imported by Geisweiler.

28. P. CAMPERI Dissertationes decem, quibus ab illustribus Europæ precipue Galliæ Academiis Palma adjudicata, cum Tab. 2 vols. Lingæ. 1800. Price 1l. 5s. Imported by Geisweiler.

29. PLOUQUET, Supplementa Bib. Med. Vol. II. Quarto. Tubingæ. 1800. Price 1l. 1s. Imported by Geisweiler.

30. KAUSCH, Geist und Kritik der medicinischen und chirurgischen Zeitschriften Deutschlands für Aerzte und Wundärzte. 4 vols. Octavo. Leipsig. 1798-1800. Price 1l. 1s. Imported by Geisweiler.

31. ARNEMANN, Handbuch der pracktischen Medicin. 2 vols. Octavo. Göttingen. 1800. Price 12s. 6d. Imported by Geisweiler.

32. RICHTER über die neuern Gegenstaende der Chemie. Breslau. 1799. Price 2s. 6d. Imported by Geisweiler.

34. JACQUIN, Lehrbuch der allgemeinen und medicinischen Chemie. 2 vols. New edit. Wien. 1798. Price 12s. 6d. Imported by Geisweiler.

35. HUFELAND, Kunst das menschliche Leben zu verlängern. 2 vols. Jena. 1798. Price 7s. Imported by Geisweiler.

36. BEER, Repertorium aller bis zu Ende des Jahrs 1797 erschienenen Schriften über die Augenkrankheiten. Vol. II. and III. Wien. 1800. Price 12s. 6d. Imported by Geisweiler.

37. A. VOGT, Anatomisch physiologisch chirurgische Abhandlung eines sehr seltenen zusammen gesetzten Bruchs beider Schulter blätter und des rechten Schlüsselbein. Leipsig. 1800. Price 5s. Imported by Geisweiler.

38. FRIEDRICH, das pollinische Decoct und reinigende Wirkungen der welchen Nuss schale wider die Luftseuche. Wien. 1800. Price 1s. 6d. Imported by Geisweiler.

39. SONNENBURG, Compendium Syndesmo-osteologicum für angehende Wundärzte. Berlin. 1800. Price 5s. 6d. Imported by Geisweiler.

40. Taschenbuch für gerichtliche Aerzte und Wundaerzte bei gesetzmaessigen Leichenöffnungen. Entworfen von D. T. G. A. ROOSE, Prof. zu Braunschweig. Bremen. 1800. Price 3s. Imported by Geisweiler.

41. Schauderhafte Geschichte einer in Muhlhausen vorgefallenen sogenannten Naehgeburts Operation. Jena. 1799.

42. Beytraege zum Archiv der medicinischen Polizey und Volksarzney. By J. C. SCHERF. Octavo. 1799.

43. Wahrnehmungne am medicinischen und chirurgischen Krankenbette. By Dr. WEDELSTADT. Wezlar.

44. Beytraege zur Theoretischen und Pracktischen Geburtshulfe zur Kaentnifs und Cur einiger Kinderkrankheiten. By WIGAND, Man-midwife at Hamburgh. Part I.

INTENDED PUBLICATIONS.

45. Dr. ROLLO is preparing a Supplement to his Volume on the Diabetes and Lues Venerea, which will probably be published during the winter.

46. Dr. TRINDER is nearly ready to publish a second, and much enlarged, Edition of his Essay on Oil, &c. &c.

47. We understand that the summer has been employed by Mr. WILSON in preparing for the press a new and complete System of Anatomy, which is in a state of forwardness.

48. We are informed that a Treatise is in the press, containing original letters on the cancerous Breast, by Dr. BAILLIE, Mr. CLINE, Dr. BABINGTON, Mr. ABERNETHY, and Dr. STOKES; with answers to each of them, by Dr. JOSEPH ADAMS, of Madeira, the author of an ingenious work on morbid Poisons.

49. An Analysis of BROWN's Elements of Medicine, in two parts, will soon make its appearance at Vienna.

50. In a few weeks will be published two quarto volumes on the Principles of Surgery, by Mr. JOHN BELL, of Edinburgh.

51. A chemical Analysis of the Hampstead mineral Water is said to be preparing for the press, by Mr. BLISS, Surgeon, of Hampstead.

Art. 29. *Answers to Readers and Correspondents.*

IN answer to the several queries of MEDICUS, we acquaint him,

1st, That the casts of the pelvis of Elizabeth Thompson, the subject of the Cæsarean section at Manchester, which has unfortunately occasioned a schism among the practitioners in midwifery there, may be had of Mr. SARDINI, London, and of Mr. CHIPPENDALE, Apothecary to the Lying-in Hospital at Manchester.

2d,

2d, The museum belonging to the late Mr. JOHN HUNTER has been purchased by Government, and presented to the College of Surgeons; who are engaged to furnish proper rooms and officers for its reception and preservation; as well as to give annually a course of lectures thereon, for the benefit of chirurgical students, &c.

3d, The Infant Asylum, we understand, has been lately discontinued.

4th, Dr. SCHMIDT, of Osnaburg, (see page 223, in our Eighteenth Number,) is about to publish a discovery of the imposition carried on by the person who was supposed to have lived many months without food or drink; an account of which we copied in the Second Volume of our Review, page 484, & seq.

5th, Persons who only practise midwifery in London are not required to undergo any examination. The College of Surgeons have not hitherto (either in their new capacity, as a College, or formerly, as a Company) undertaken to examine, or grant licenses to persons in this line of business, although it is more properly within their district than in that of the College of Physicians. It might be useful, and indeed seems necessary, that Parliament should invest the College of Surgeons with power to call before them all persons practising midwifery, not possessed of diplomas constituting them doctors of physic; such persons being only amenable to the College of Physicians.

We are at a loss to comprehend what is meant by the anonymous letter transmitted to us concerning *Elephantiasis*.

* * * The Engraving of Professor ARNEMAN'S, and Mr. TRAMP-
PEL'S Instrument is to face page 65.

THE
LONDON MEDICAL REVIEW
AND
MAGAZINE.

VOL. V. N^O XXII. DECEMBER MDCCC.

ANALYSIS OF BOOKS.

ART I. *Annales Instituti Medico-clinici Wirceburgensis redegit et Observationibus illustravit* I. N. THOMANN, Medicinæ et Chirurgiæ Doctor, Therapiæ generalis Professor publicus, principalis Nosocomii Julii Medicus primarius, Scholam Medico-clinicam dirigens, atque Societatis Medicor. et Chirurgor. per Helvetiam correspond. Sodalis. Volumen primum, cum v. Figuris Æri incis. Octavo. 307 pages. KÖL, Wirceburgi. 1799. Imported by GEISWEILER. Price 6s.

THIS work is prefaced by a minute historical account of the origin, progress, and present state of the JULIAN hospital at Wirtzburg. From hence, and from the prefixed plate of the building, we learn that it is a noble edifice, equal in size, and certainly superior in its accessory accommodation, such as anatomical theatres, dissecting-rooms, botanic gardens, &c. to any thing this country can boast of. Its permanent re-

venues suffice to maintain, besides an indefinite number of sick, that is to say, as many as the wards set apart for that purpose can at all times accommodate, fifty-five poor old men and seventy-five women of the same description, fifty-two insane people of both sexes, and eight epileptics. Thirty students are also clothed, fed, and instructed in various departments of literature; with two preceptors, fifty-six servants, and upwards of sixty domestics of various denominations. The diet allowed to the sick, as well as the healthy, is liberal, and well selected; and the general regulations for the conduct of this charitable institution, which does no small honour to the humanity of the princes by whom it has been established and is supported, seem well calculated to ensure every degree of comfort to its inhabitants.

The manner in which the students of physic are initiated into practice, appears very judicious, and worthy of imitation. After accompanying the physician, during some time, to the bedside of the patients as silent spectators of his practice, they are at length intrusted with the care of a patient, for whom they order such diet, and prescribe such medicines, as they judge proper; their prescriptions and regulations being always subject to the inspection and correction of the superintending physicians. This must tend much more to rouse the attention and acuate the ideas of the young practitioner, than the comparatively idle plan of what is termed *walking* the hospitals in this country.

Dr. Thomann has, we think, very judiciously determined that the general utility of this institution would be still further augmented by publishing the results of the medical practice. The cases are divided into such as occurred in particular months; to each of which is prefixed a statement of the daily mean height of the thermometer and barometer, the state of the weather, and what may be termed a view of the epidemical constitution of the month. The cases are in general drawn up by the practitioner to whose care the patient was peculiarly intrusted,

intrusted, and the observations and corrections of the superintending physician are occasionally added.

In the course of nine months, the period embraced by these observations, two hundred and forty-six patients were admitted; of whom thirteen died, *i. e.* in the proportion of one to nineteen.

As a specimen of the author's method, we shall insert his account of what may be termed the medical constitution of one month, and the treatment of a case occurring during its continuance.

APRIL. The beginning of this month was cold and stormy. Till the 4th there was rain, followed by serene warm weather. About the 10th it became again cold and windy. About the 19th it was warm, the atmosphere generally cloudy, and some rain. From the 21st to near the end of the month, windy, cold, clear, and dry, excepting the last three days, which were warm.

Catarrhs, rheumatisms, pleurisies, peripneumonies, hæmoptyses, anginæ, ophthalmiæ, were very frequent complaints till the end of the month. Towards the end, however, diseases accompanied with rheumatic pains of the joints, catarrhal fevers, and tertian intermittents, became more common. Only one case of a double tertian occurred.

Catarrhal fevers were most common, and might almost be termed epidemic; they usually commenced by shiverings, which were soon succeeded by heat. For many days an unpleasant sensation of heat affected the limbs, accompanied with lassitude and darting pains. The skin hot and dry, but, during the remission of the fever, humid and relaxed, accompanied with general bursts of perspiration, during which the patients experienced much relief. The nights were restless, with frightful dreams, and slight delirium; acute pain of the head, as if it would split. This pain occupied occasionally the temples, the occiput, face, forehead, and the whole of the head; it generally was most violent towards the evening, ac-

companying the exacerbation of the fever. The violence of the cough frequently occasioned redness of the face, inflammation of the eyes, a profusion of tears, vertigo, and noise in the ears.

After describing minutely other symptoms of this disease, as well as of ophthalmia and rheumatism, the author recites the symptoms attending pleurisy and peripneumony; and with respect to their mode of cure observes, that the violence of the disease, in those who applied for his assistance on the first attack, usually continued five, seven, or eleven days: the sick seldom, however, left their beds sooner than fourteen days or more; and in general they recovered, with the exception of such as were improperly treated, either by too copious venesection, by the use of stimulants or purgatives, or the total neglect of medicine. In these circumstances all the symptoms were exasperated, the pulse became quick, feeble, and creeping, great anxiety was felt, and the heat of the body was augmented.

From the use of purgatives little benefit was derived; many found themselves worse after them, and their fever exasperated. Whence it may be inferred, that purgatives, although they debilitate, are by no means remedies calculated to discuss inflammation. I pass over stimulants, says the author, as wine or spirits, which are too frequently had recourse to by the vulgar, with a view to alleviate the early symptoms of fever, such as languor and debility; but which never fail, by their additional stimulus, to augment all the symptoms of the disease, and by this increase of irritation often fatally exhaust the living powers. Hence the pulmonary vessels lose their oscillatory power; indirect debility, as it is termed, takes place; the disease tends either towards gangrene or hydrothorax, and the patient dies, his strength being exhausted. It would be fortunate for our art, could it so moderate the action of stimuli, that inflammation arising from debility (or of the passive or asthenic species) might terminate in resolution, as in the second history.

The

The principal remedy in the inflammatory stage was taking blood from a large orifice in the vein of the side where the pain was situated, in proportion to the strength of the patient. Small blood-lettings, unless very frequently repeated, whenever the signs of inflammation returned, as dry cough, darting pain of the side, and hard pulse, gave little relief. When too copious, however, the vital powers were exhausted, and direct debility ensued; after which all hopes of a favourable resolution vanished. This improper treatment was followed by quick, feeble, small pulse, easily eluding the slightest pressure of the finger; trepidation of mind, noise in the ears, paleness of the countenance, short, anxious, and quick respiration, total dejection and prostration of the strength and of mental energy; with a dry and hot skin, limpid urine, and no spitting.

In this species of debility, whether the consequence of erroneous treatment, or of natural and profuse hæmorrhage from the nostrils, producing inaction in the solids and congestion in the lungs, the assistance of the excitantiæ was called in; among which blistering was of singular efficacy; as well as camphor, opium, serpentaria, china, &c.

Besides venesection, from which, when early resorted to, and repeated according to the indications, the patient always experienced the most decided relief; mucilaginous decoctions, as of barley, althæa, grass roots, with honey, &c. were found sufficient to accomplish the cure. In more severe cases of the disease nitre was administered in such doses as not to affect the bowels, which were kept soluble by means of clysters.

When the darting pain was peculiarly severe, emollient cataplasms with soap were applied to the parts.

These things being duly observed, the disease generally tended to a benign resolution, either by a copious, thick, puriform spitting, or as it is termed concocted, discharged by a gentle cough, or by spitting accompanied by sweats, never by these last alone.

In

In the inflammatory stage vesicatories were not applied, for even their stimulus seemed to rouse the fever. But after venesection, when the inflammatory diathesis and fever tended to subside, with a weak and small pulse, blistering plasters applied over the part where the pain was seated, produced admirable effects, which, the inflammation being reduced, when the disease tended to assume the nervous character, were aided by remedies of the exciting kind, as opium, camphor, and antimonials. By these a concocted spitting was promoted, and the disease constantly and securely removed.

The Doctor observed, that in hæmoptysis, the loss of blood to the same extent which in peripneumony was useful, proved extremely injurious. He was therefore very cautious in the use of phlebotomy, as it frequently seemed to produce the most alarming prostration of strength and general debility.

The following is a fair example of the manner in which the cases are narrated :

Joseph Faulstitch, 20 years of age, a farmer's servant, of a robust frame, and always accustomed to enjoy good health, living a laborious life, with abundant and nourishing food ; on the 27th of March, while occupied in rural labours, was seized with shivering, lassitude, a pungent pain in the right side, anxiety, and a short cough, which obliged him to return home. These symptoms increasing, with great thirst, which he endeavoured to assuage by drinking copiously of cold water, he was confined to bed. 28th, All the symptoms exasperated, the cough more frequent, with tough spittle streaked with blood ; could lie on either side. This day he drank some beer. 29th, The symptoms augmented by drinking a little strong wine. The body opened by a mild cathartic : the night more quiet. 30th, The symptoms mitigated by moderate blood-letting. 31st, The cough again exasperated by the use of wine ; the spittle more bloody. The night very restless. April 1st, The same ; but greater sense of debility. 2d, The same. 3d, Rather worse. 4th, In the evening brought to the hospital complaining

complaining of a pungent pain in the right side, which was much increased by coughing, with titillation of the trachea, producing incessant propensity to cough. The spittle was yellow, slightly tinged with blood; the breathing short, frequent, and anxious; the pulse quick, full, and rather strong; the heat great, skin dry, cheeks flushed, thirst considerable; the tongue moist, and covered with white mucus; no appetite; the abdomen swelled, and the body bound. There was prescribed as follows:

℞ Aq. font. ℥viii, Pulv. gum. Arab. ℥iij, Syrup. diacod. ℥j. M.D.S. Capiat omni hora unciam semis. Pro potu exhibeatur decoctum hordei cum oxymelle. Diæta inanis sine vino: clysma emolliens.

April 5th. Passed a restless night. In the morning the symptoms nearly the same, heat little diminished, two alvine discharges apparently promoted by the clyster. Urine high-coloured and crude.

℞ Aq. font. ℥vj, Nitri depurat. ℥ij, Syrup. emulsiv. ℥j. M.D.S. Capiat omni hora unciam semis. Adplicentur ad partem dolentem sex hirudines.

In the evening the leeches had produced a copious discharge of blood. The pain of the breast was not diminished, respiration shorter, more difficult, pulse stronger, more frequent, and quicker; the spittle yellow, and thirst great.

On the 6th all the symptoms were rather worse.

℞ Camphoræ, Mucilag. gum. Arab. q. s. bene subact. ℥j, Aq. font. ℥vj, Syrup. diacod. ℥j. M.D.S. Omni hora capiat duo cochlearia. Adplicetur ad pectus vesicans. Jusculum nutriens cum ovo pro diæta.

In the evening there was an exacerbation.

The 7th brought no mitigation of the symptoms.

℞ Aq. font. ℥viii, Laud. liquid. Sydenham. ℥j, Syrup. emulsiv. ℥j. Alternatim cum mixtura camphorata sumat omni hora unciam dimidiam.

In the evening there was a slight discharge of blood from the nose.

8th. The symptoms continued much the same.

9th. The patient slept. In the morning a heavy pain was felt all over the breast, the respiration was less difficult, and not so short. The pulse less frequent, softer, and more full; thirst diminished, tongue moist, spittle thick, white, concocted, and more copious; two fetid stools.

R Rad. polygal. seneg. ℥ij, Lichen. Island. ℥iij. Coq. e. s. q. aq. colat. ℥viij, adde Syrup. diacod. ℥j. M.D.S. Sumat omni hora unc. semis. Et R Lichen. Island. ℥ij, Rad. altheæ ℥j. M.D.S. Species pro potu. Diæta magis nutriens.

In the evening there was a discharge of blood from the left nostril, with considerable alleviation of all the symptoms.

10th. The patient rested well. Hardly any pain of the side remaining; respiration easy and slow, pulse soft and full, little cough, spitting concocted and copious, tongue moist, thirst trifling, heat diminished, skin soft and moist; in short, a general alleviation of all the symptoms.

In the evening the patient complained very much of a general sense of lassitude.

R Pulv. rad. ipecacuanh. gr quadrans, Opii pur. gr dimid. Sach. alb. gr x. M.D.

11th. The patient slept well, and all the symptoms were diminished.

R Cort. Peruv. ℥ß, Rad. polygal. amar. ℥ij. Coq. in s. q. aquæ. Colat. ℥viij adde Mel. opt. ℥j. M.D.S. Sumat omni hora ℥ß. Repet. species pro potu ex lichene.

12th. Rested well, and appears to be much better.

13th. Slept well. In the morning complained much of lassitude and ringing of the ears; respiration not at all affected, pulse full and slow, no cough.

R Pulv. rad. valerian. ℥vj. Infund. in aq. ferv. ℥viij. Colat. adde Extr. cort. Peruv. ℥ij, Mel. opt. ℥j. M.D.S. Sumat omni hora ℥ß. Repet. species pro potu ex lichene.

In the evening better.

On the 15th the patient was totally free from all complaints, and on the 29th left the hospital in perfect health. This

This is a fair case of peripneumony terminating by resolution, and the treatment of the disease appears to have been very judicious. It is curious to observe, that on the continent, in every species of pulmonary complaint, the lichen Islandicus is employed, and apparently relied on as an active remedy; whereas, in the practice of this country, it is almost wholly disregarded. Is this neglect founded on caprice, or on any certain experience of its inutility? There is in this volume one singular case of recovery from a far-advanced stage of phthisis pulmonalis.

The following observations on diseases arising from the abuse of mercury are judicious, and we think will prove interesting to many of our readers.

So great is the mischief arising from improper treatment of the venereal disease, that the complaint itself appears less destructive, than the incautious use of mercurial preparations, especially of corrosive sublimate. Frequent opportunities have occurred to me (says the author) of observing hæmoptyses, ulceration of the lungs, dyspnœa, hectic fever, inveterate ulcers of the nose and fauces, darting pains of the joints, tumours of the bones, inflammation, caries, ulceration of the common integuments, and such like. Patients labouring under these symptoms, and imploring medical assistance, are frequently treated as if affected with syphilis, although they had before taken immense quantities of mercury, particularly if they had ulcers in the throat, and pains of the bones, symptoms not uncommonly produced by mercury.

In these cases, the difficulty of discriminating whether a venereal taint still lurks, or whether the symptoms be wholly the effects of mercury, will always be considerable. We know of no characteristic marks by which they may be distinguished. The disease either disguises itself under the form of some other complaint, or the disorders produced by the improper exhibition of mercury exhibit the appearance of venereal symptoms; so that the most scrupulous examination

of the present and past state of the patient discovers nothing decisive. The condition of such patients is indeed lamentable, particularly if they use sublimate; for, while they repose the utmost confidence in medicine, and in their physicians, they miserably perish. The only circumstance, which should at least teach practitioners caution in this doubtful state of things, is the great quantity of mercury already taken, or the increase of all the symptoms during its use. If, for example, ulcers are the chief symptoms, under the influence of mercury they assume a worse appearance, cover a larger surface, become painful, with relaxed and livid edges, and their base appears foul and lardaceous; old cicatrices often open afresh, a cheesy matter of a yellow or greenish colour is occasionally discharged, alternating with a thin bloody ichor. Hectic fever now takes place, or the nocturnal gnawing pains augment, or the exostoses, tophi, and gummata, increase in size. These symptoms are frequently aggravated by an incessant salivation, accompanied with a peculiar foetor of the mouth, erosion of the teeth, and laxity and ulceration of the gums similar to what occurs in scurvy. In this situation of affairs, if the use of mercury be laid aside, and other proper remedies are employed, in a short time the patient will recover strength, the ulcers will heal, the gnawing pains will be mitigated or removed, and the salivation will diminish; but if persisted in, the disease will resist every attempt to cure it, and the patient be carried off by a slow fever. Among the remedies recommended by ancient or modern writers to remove these effects of the maladministration of mercury, opium, china, and the warm bath, maintain the first rank, which indeed I have found very efficacious. Every thing that I have heard or read of, as recommended by respectable names, I have tried on different occasions, but with little or no advantage. Assa-fœtida combined with opium is useful in exostoses, and in caries of the bones of the nose, as well as of other parts of the body, and

in

in nocturnal pains. China with opium is useful in obstinate ulcerations of the fauces, in ulceration of the skin, in profuse salivation, in gnawing pains of the bones, nocturnal pain of the head, hæmoptysis, night sweats, colliquative diarrhœa, and other complaints originating in debility.

These observations are illustrated by the narration of a case, in which, however, we perceive nothing uncommon. The principal intention seems to have been to make a determination towards the surface, and to support the strength by suitable diet; but the salivation did not appear to subside sooner than it commonly does in consequence of free exposure to the open air, which, in such cases, we have always found useful.

We meet with a history of what the author denominates a bone in the heart; which to us appears to be what is commonly known by the appellation of an ossification of the semi-lunar valves, occupying, indeed, a considerable extent. The previous symptoms were palpitation, lancinating pains, difficulty of breathing, &c. The patient was a woman, 74 years of age. On dissection, adhering to the under part of the semi-lunar valve of the left ventricle, a bony mass was found, two inches and a half long, the other side projecting into the cavity of the ventricle about a quarter of an inch in thickness. The pressure of this bony substance had produced ulceration in some parts of the internal cavity of the ventricle.

This and some other cases are accompanied by engravings.

Upon the whole, this specimen of Dr. Thomann's work appears to be a very useful publication; and while it continues in the present able hands, will, no doubt, be well received, as giving a general view of the practice in one of the most respectable medical institutions on the continent. It is curious to trace, in this volume, the silent progress which the medical theories originating in this country are gradually making in the science of physic abroad.

We cannot resist the present opportunity of expressing an
opinion,

opinion, that a publication of a similar kind, emanating from some great hospital, would be extremely well received in this country. It would not only afford a public pledge, that those who superintend the institution are attentive to their duty, but be of great utility in diffusing a general knowledge of the modes of treating diseases by the most respectable practitioners of the time. In this respect, it would much excel our periodical publications, consisting chiefly of the histories of marvellous and uncommon cases, in which the view of the narrator is more frequently to attract personal notice, than to promote the improvement of medical knowledge.

In conclusion, we subjoin a case of retention of urine, which we give in the language of the author.

“ Retentio Urinæ.

“ Ancilla quædam, 30 annos nata, temperamento sanguineo, habitu corporis robusto ac magno prædita, vegeta satis, nunquam morbis detenta, in malum mox describendum incidit. Initia fluxus menstrui 24to ætatis suæ anno experta est, qui ad provectionem usque ætatem valde modicus ac fere semper irregularis fuit.

“ Duobus circiter abhinc mensibus a famulis duobus robustis rusticis in ejus animo libidinis incenditur ignicula. Mox veneris exagitata stimulis in eorum amplexus ruit, atque ultra duorum mensium spatium coitus frequentissimos celebrat, ita quidem, ut amator uterque per vices, noctis tempore, bis vel ter gratum hoc officium ei administrandum suscepit; quem in finem illa noctu supra tectum ædis scandens suos amatores tabulati inferioris vicinarum ædiûm stabulum inhabitantes inviserat. Ast immodico, sat gravi ac frequenti veneris hoc exercitio, ut facile conjicies, partes verendæ ac vicinæ initio grata titillatione irritatæ magis, mox nimio stimulo ac sæpius repetito laxatæ sunt atque debilitatæ. Hinc incidit misera in morbum, quem urinæ retentionem adpellamus, ex debilitate locali ortum, quum adessent omnia perfectæ sanitatis criteria, aliæque potentiæ nocentes deficerent. Eam urinæ retentionem

per

per duos dies experta est, graviterque tulit. Adauctis demum molestiis et abdominis cruciatibus, opem chirurgi imploravit, qui ventrem ejus inter dolores inflatum et durum ac vesicam urinariam expansam invenit, ideoque catheteris instrumento urinas sex librarum ponderis eduxit, quo subito detumuit venter. Ast elapso brevi temporis intervallo revertebantur eadem incommoda, vesicæ ac ventris tumor, nonnisi catheterismo removenda, quam operationem per quatuor vices sustinuit ægra, et fere semper urinæ quinque vel sex libræ fuerunt eductæ. Morbo tamen eo methodo, tanquam cura palliativa, non omnino sufflaminato, quum urinæ retentio et post institutam operationem gravior per vices reverteretur, die 20ma Junii nosocomium petiit, ac ob morbum et paupertatem recepta est.

“ Examine instituto invenimus, ægram per quatuor menses menstruale flumen non esse expertam, omnes ejus functiones in statu sano versari, neque febrem neque pulsum a naturali aberrantem adesse. Porro abdomen versus pubis regionem æqualiter tumidum, inflatum, durum, ab adtactu dolens. Quum insuper per longum temporis spatium ne guttula quidem urinæ per urethram emissã sit, et adhuc retineatur; conclusimus, vesicam urinæ copia esse repletam atque extensam indeque ventris illum tumorem externa exploratione percipiendum. Partes externæ verendæ tumidæ erant atque laxæ. Internarum exploratio uti externarum nulla præbuit graviditatis indicia. Adplicabatur catheter haud difficulter immittendus, quo urinæ tres fere mensuras eduximus. Ea vero emissã statim venter detumuit, mollitiem sub adtactu non dolentem retulit, atque ægra ipsa de perfecta sua sanitate gavisa est. Nihilo tamen minus urinæ retentio per tres vices revertebatur, iterum iterumque catheteris immissione sublata.

“ Quum igitur præter curam hanc palliativam curatoria seu radicalis instituenda esset, ad alia simul confugimus remedia. Præcipue autem absentibus morbi universalis indicia, prægressis potentiis nocentibus, indirectam ac localem debilitatem inducentibus, morbum localem a debilitate ortum judicavimus, eumque et remediis localibus atque incitantibus,

tantibus, concesso lautiore cibo ac vino aqua diluto profligare conati sumus. Itaque corticem peruvianum, herbam melissæ, roris marini, marubii albi, vino rubro decocta, ut calida fomenta, abdomini, regioni pubis et verendis imponenda, inter abdominis frictiones cum oleo bezoardico Wedelii, naphtha vitrioli, ac laudano liquido Sydenhami adplicari jussimus. Quibus per triduum continuatis sensim cœpit ægra per guttas emittere urinam, laxæ ac tumidæ verendæ partes solitum acquirebant tenorem, detumebant, uti et venter. Restituto denique omnino urinæ effluxu, et evanidis omnibus molestiis, ægra ceterum sana ad finem Junii nosocomium dereliquit.

“JUCH.”

ART. II. *Mr. DAVY's Chemical and philosophical Researches.*

(Concluded from page 27.)

IN our last Number we gave a general account of the subjects treated of in this work, with some idea of the nature and method of producing the nitrous oxide: we are now to shew the effects of the oxide on animal bodies, and on man. Dr. Beddoes has given several specimens of its effect on the human species, in his Notices of some Observations made at the Pneumatic Institution; but our author treats the subject more methodically: he begins with stating the effects produced by the oxide on animals. Gases are either respirable, that is, such as an animal may breathe, or non-respirable. These latter, he says, “when applied to the external organs of respiration, stimulate the muscles of the epiglottis in such a way as to keep it perfectly close on the glottis; thus preventing the smallest particle of gas from entering into the bronchia, in spite of voluntary exertion.” Persons, therefore, suffocated by the fumes of charcoal, the carbonic acid, die of of a disease produced by privation of atmospheric air, analogous to that occasioned by submersion in water. For the proof of this fact, the author refers to the experiments of

Rosier,

Rosier, published in the *Journal de Physique* for the year 1786. In order to discover whether the nitrous oxide was respirable, and for what length of time animals might breathe in it, he instituted a set of experiments, first on warm-blooded, then on amphibious animals. Specimens of each we shall lay before our readers.

“ On the Respiration of Nitrous Oxide by warm-blooded Animals.

“ The nitrous oxide employed,” the author says, “ in the following experiments was procured from nitrate of ammoniac, and received in large jars, filled with water previously saturated with the gas. The animal was introduced into the jar, by being carried under the water; after its introduction, the jar was made to rest on a shelf, about half an inch below the surface of the water; and the animal carefully supported, so as to prevent his mouth from resting in the water.

“ This mode of experimenting, either under water or mercury, is absolutely necessary, to ascertain with accuracy the effects of pure gases on living beings. In some experiments that I made on the respiration of nitrous oxide, by animals that were plunged into jars of it opened in the atmosphere, and immediately closed after their introduction, the unknown quantities of common air carried in were always sufficient to render the results perfectly inaccurate.

“ Animals suffer little or nothing by being passed through water.

“ That the phenomena in these experiments might be more accurately observed, two or three persons were always present at the time of their execution, and an account of them was noted down immediately after.

“ A stout and healthy young cat, of four or five months old, was introduced into a large jar of nitrous oxide. For ten or twelve moments he remained perfectly quiet, and then began to make violent motions, throwing himself round the jar in every direction. In two minutes he appeared quite exhausted, and sunk quietly to the bottom of the jar. On
applying

applying my hand to the thorax, I found that the heart beat with extreme violence ; on feeling about the neck, I could distinctly perceive a strong and quick pulsation of the carotids. In about three minutes the animal revived, and panted very much ; but still continued to lie on his side. His inspirations then became longer and deeper, and he sometimes uttered very feeble cries. In four minutes the pulsations of the heart appeared quicker and feebler. His inspirations were at long intervals, and very irregular ; in five minutes the pulse was hardly perceptible ; he made no motions, and appeared wholly senseless. After five minutes and a quarter he was taken out, and exposed to the atmosphere before a warm fire. In a few seconds he began to move, and to take deep inspirations. In five minutes he attempted to rise on his legs, but soon fell again, the extremities being slightly convulsed. In eight or nine minutes he was able to walk, but his motions were staggering and unequal, the right leg being convulsed, whilst the other was apparently stiff and immovable ; in about half an hour he was almost completely recovered.

“ A healthy kitten, of about six weeks old, was introduced into nitrous oxide. She very soon began to make violent exertions ; and in less than a minute fell to the bottom of the receiver, as if apoplectic. At this moment, applying my hand to her side, I felt the heart beating with great violence. She continued gasping, with long inspirations, for three minutes and half ; at the end of five minutes and half she was taken out completely dead.

“ Another kitten of the same breed was introduced into nitrous oxide, the day after. She exhibited the same phenomena, and died in it in about five minutes and half.

“ A strong rabbit, of ten or twelve months old, was introduced into nitrous oxide. He immediately began to struggle very much, and in a minute fell down senseless ; in two minutes his legs became convulsed, and his inspirations were deep and noisy : in less than five minutes he appeared perfectly dead.

“ A rabbit

“ A rabbit of a month old introduced into nitrous oxide became senseless in less than a minute; the pulsations of the heart were very strong at this moment: they gradually became weaker, and in three minutes and half the animal was dead.

“ Another rabbit of the same breed, after being rendered senseless in nitrous oxide in a minute and half, was taken out. He soon became convulsed; in a minute he began to breathe quickly; in two minutes attempted to rise, but staggered, and fell again on his side. His hinder legs were paralytic for near five minutes. In twenty he had almost recovered.

“ A large mouse, introduced into the nitrous oxide, was for a few seconds very active. In half a minute he fell down senseless; in a minute and quarter he appeared perfectly dead.

“ A mouse taken out of nitrous oxide, after being in it for half a minute, continued convulsed for some minutes, but finally recovered.

“ A young hen was introduced into a vessel filled with nitrous oxide. She immediately began to struggle very much; fell on her breast in less than half a minute, and in two minutes was quite dead.

“ A goldfinch died in nitrous oxide in less than a minute.

“ In each of these experiments a certain absorption of the gas was always perceived, the water rising in the jar during the respiration of the animal. From them we learn,

“ 1st, That nitrous oxide is destructive when respired for a certain time, to the warm-blooded animals, apparently previously exciting them to a great extent.

“ 2dly, That when its operation is stopped before complete exhaustion is brought on, the healthy living action is capable of being gradually reproduced, by enabling the animal to respire atmospheric air.

“ 3dly, That exhaustion and death is produced in the small

animals by nitrous oxide sooner than in the large ones, and in young animals of the same species in a shorter time than in old ones, as indeed Dr. Beddoes had conjectured *à priori* would be the case."

The following changes were observed by the author to be effected in the animals that had been destroyed by inspiring the oxide :

" The external appearance," he says, " of animals that have been destroyed in nitrous oxide is very little different from that of those killed by privation of atmospheric air. The fauces and tongue appear of a dark red, and the eyes are dull, and a little protruded. Their internal organs, however, exhibit a very peculiar change : the lungs are pale brown red, and covered here and there with purple spots ; the liver is of a very bright red, and the muscular fibre in general dark. Both the auricles and ventricles of the heart are filled with blood. The auricles contract for minutes after the death of the animal. The blood in the left ventricle and the aorta is of a tinge between purple and red, whilst that in the right ventricle is of a dark colour, rather more purple than the venous blood."

From the above, and a variety of other experiments, the author concludes,

" 1st, That warm-blooded animals die in nitrous oxide infinitely sooner than in common air or oxygene ; but not nearly in so short a time as in gases incapable of effecting positive changes in the venous blood, or in non-respirable gases.

" 2d, The larger animals live longer in nitrous oxide than the smaller ones, and young animals die in it sooner than old ones of the same species.

" 3d, When animals, after breathing nitrous oxide, are removed from it before complete exhaustion takes place, they are capable of being restored to health under the action of atmospheric air.

" 4th, Peculiar changes are effected in the organs of animals by the respiration of nitrous oxide. In animals destroyed by

by it, the arterial blood is purple red, the lungs are covered with purple spots, both the hollow and compact muscles are apparently very inirritable, and the brain is dark-coloured.

“ 5th, Animals are destroyed by the respiration of mixtures of nitrous oxide and hydrogen nearly in the same time as by pure nitrous oxide; they are capable of living for a great length of time in nitrous oxide mingled with very minute quantities of oxygen or common air.”

The next series of experiments was instituted to shew the effects produced on amphibious animals by respiring the nitrous oxide.

“ As from the foregoing experiments,” the author says, “ it appeared that the nitrous oxide destroyed warm-blooded animals by increasing the living action of their organs to such an extent, as finally to exhaust their irritability and sensibility; it was reasonable to conjecture that the cold-blooded animals, possessed of voluntary power over respiration, would so regulate the quantity of nitrous oxide applied to the blood in their lungs as to bear its action for a great length of time. This conjecture was put to the test of experiment; the following facts will prove its error:

“ Of two middle-sized water-lizards, one was introduced into a small jar filled with nitrous oxide, over moist mercury, by being passed through the mercury; the other was made to breathe hydrogen, by being carried into it in the same manner.

“ The lizard in nitrous oxide in two or three minutes began to make violent motions, appeared very uneasy, and rolled about the jar in every direction, sometimes attempting to climb to the top of it. The animal in hydrogen was all this time very quiet, and crawled about the vessel without being apparently much affected. At the end of twelve minutes, the lizard in nitrous oxide was lying on his back, seemingly dead; but on agitating the jar he moved a little: at the end of fifteen minutes he did not move on agitation,

and his paws were resting on his belly. He was now taken out stiff, and apparently lifeless; but after being exposed to the atmosphere for three or four minutes, took an inspiration, and moved his head a little; he then raised the end of his tail, though the middle of it was still stiff and did not bend when touched. His four legs remained close to his side, and were apparently useless; but on pricking them with the point of a lancet they became convulsed. After being introduced into shallow water, he was able to crawl in a quarter of an hour, though his motions were very irregular. In an hour he was quite well. The animal in hydrogen appeared to have suffered very little in three quarters of an hour, and had raised himself against the side of the jar. At the end of an hour he was taken out, and very soon recovered.

“ Some hours after, the same lizards were again experimented upon; that which had been inserted into hydrogen in the last experiment being now inserted into nitrous oxide.

“ This lizard was apparently lifeless in fourteen minutes, having tumbled and writhed himself very much during the first ten minutes. Taken out after being in twenty-five minutes, he did not recover. The other lizard lived in hydrogen for near an hour and quarter; taken out after an hour and twenty minutes, he was dead.

“ These animals were both opened; but the viscera of the nitrous oxide lizard were so much injured by the knife, that no accurate comparison of them with those of the other could be made. I thought that the lungs appeared rather redder.

“ Of two similar large water-lizards, one was introduced into a vessel standing over mercury, wholly filled with water that had been long boiled and suffered to cool under mercury.

“ The animal very often rose to the top of the jar, as if in search of air, during the first half hour; but shewed no other signs of uneasiness. At the end of three quarters of an hour he became very weak, and appeared scarcely able to swim in

the water. Taken out at the end of fifty minutes, he recovered.

“ The other was inserted into nitrous oxide. After much struggling, he became senseless in about fifteen minutes, and lay on his back. Taken out at the end of twenty minutes, he remained for a long time motionless and stiff, but in a quarter of an hour began to move some of his limbs.

“ From these experiments we may conclude, that water-lizards, and most probably the other amphibious animals, die in nitrous oxide in a much shorter time than in hydrogene, or pure water; consequently their death in it cannot depend on the simple privation of atmospheric air.

“ At the season of the year in which this investigation was carried on, I was unable to procure frogs or toads. This I regret very much.

“ Supposing that cold-blooded animals die in nitrous oxide from positive changes effected in their blood by the gas, it would be extremely interesting to notice the apparent alterations taking place in their organs of respiration and circulation during its action, which could easily be done, the membranous substance of their lungs being transparent. The increase or diminution of the irritability of their muscular fibre might be determined by comparative galvanic experiments.”

We shall pass over the experiments on fishes and insects, which were all destroyed by the oxide in a longer or shorter period of time, and proceed to the fourth and last part of the work, in which the author gives the result of the experiments to discover the effects produced on the human species by breathing the nitrous oxide. In the course of this inquiry the author made some experiments of so dangerous a nature as nearly to have cost him his life: these we shall give at length, as they may deter other young projectors from hazarding similar experiments; and thus, whatever may ultimately be the fate of nitrous oxide, the labours of Mr. Davy may not prove entirely useless.

“ Mr.

“ Mr. Watt’s observations,” the author says, “ on the respiration of diluted hydrocarbonate by men, and Dr. Beddoes’s experiments on the destruction of animals by pure hydrocarbonate, proved that its effects were highly deleterious.

“ As it destroyed life apparently by rendering the muscular fibre inirritable without producing any previous excitement, I was anxious to compare its sensible effects with those of nitrous oxide, which at this time I believed to destroy life by producing the highest possible excitement, ending in læsion of organization.

“ In the first experiment, I breathed, for near a minute, three quarts of hydrocarbonate mingled with nearly two quarts of atmospheric air. It produced a slight giddiness and pain in the head, and a momentary loss of voluntary power : my pulse was rendered much quicker and feebler. These effects, however, went off in five minutes, and I had no return of giddiness.

“ Emboldened by this trial, in which the feelings were not unlike those I experienced in the first experiments on nitrous oxide, I resolved to breathe pure hydrocarbonate.

“ For this purpose I introduced into a silk bag four quarts of gas nearly pure, which was carefully produced from the decomposition of water by charcoal an hour before, and which had a very strong and disagreeable smell.

“ My friend, Mr. James Tobin, jun. being present, after a forced exhaustion of my lungs, the nose being accurately closed, I made three inspirations and expirations of the hydrocarbonate. The first inspiration produced a sort of numbness and loss of feeling in the chest and about the pectoral muscles. After the second inspiration, I lost all power of perceiving external things, and had no distinct sensation, except a terrible oppression on the chest. During the third expiration this feeling disappeared, I seemed sinking into annihilation, and had just power enough to drop the mouth-piece from my unclosed lips. A short interval must have passed

passed during which I respired common air, before the objects about me were distinguishable. On recollecting myself, I faintly articulated, 'I do not think I shall die.' Putting my finger on the wrist, I found my pulse thread-like, and beating with excessive quickness.

" In less than a minute I was able to walk, and the painful oppression on the chest directed me to the open air.

" After making a few steps, which carried me to the garden, my head became giddy, my knees trembled, and I had just sufficient voluntary power to throw myself on the grass. Here the painful feeling of the chest increased with such violence as to threaten suffocation. At this moment I asked for some nitrous oxide; Mr. Dwyer brought me a mixture of oxygene and nitrous oxide. I breathed this for a minute, and believed myself relieved. In five minutes the painful feelings began gradually to diminish: in an hour they had nearly disappeared, and I felt only excessive weakness, and a slight swimming of the head. My voice was very feeble and indistinct. This was at two o'clock in the afternoon.

" I afterwards walked slowly for about half an hour with Mr. Tobin, jun. and on my return was so much stronger and better as to believe that the effects of the gas had disappeared; though my pulse was 120 and very feeble. I continued without pain for near three quarters of an hour, when the giddiness returned with such violence as to oblige me to lie on the bed; it was accompanied with nausea, loss of memory, and deficient sensation. In about an hour and half the giddiness went off, and was succeeded by an excruciating pain in the forehead, and between the eyes, with transient pains in the chest and extremities.

" Towards night these affections gradually diminished. At ten, no disagreeable feeling, except weakness, remained. I slept sound, and awoke in the morning very feeble and very hungry. No recurrence of the symptoms took place, and I had nearly recovered my strength by the evening.

" I have

“ I have been minute in the account of this experiment, because it proves that hydrocarbonate acts as a sedative, *i. e.* that it produces diminution of vital action and debility, without previously exciting. There is every reason to believe, that if I had taken four or five inspirations instead of three, they would have destroyed life immediately without producing any painful sensation. Perhaps most of the uneasy feelings after the experiment were connected with the return of the healthy condition of the organs.

“ About a week after this experiment, I attempted to respire carbonic acid, not being at the time acquainted with the experiments of Rosier.

“ I introduced into a silk bag four quarts of well-washed carbonic acid, produced from carbonate of ammoniac by heat, and, after a complete voluntary exhaustion of my lungs, attempted to inspire it. It tasted strongly acid in the mouth and fauces, and produced a sense of burning at the top of the uvula. In vain I made powerful voluntary efforts to draw it into the windpipe; at the moment that the epiglottis was raised a little, a painful stimulation was induced, so as to close it spasmodically on the glottis; and thus in repeated trials I was prevented from taking a single particle of carbonic acid into my lungs.”

Trial with Nitrous Gas.

“ Having observed, in my experiments upon venous blood, that nitrous gas rendered that fluid of a purple tinge, very like the colour generated in it by nitrous oxide; and finding no painful effects produced by the application of nitrous gas to the bare muscular fibre, I began to imagine that this gas might be breathed with impunity, provided it were possible in any way to free the lungs of common air before inspiration, so as to prevent the formation of nitrous acid.

“ On this supposition, during a fit of enthusiasm produced by the respiration of nitrous oxide, I resolved to endeavour to breathe nitrous gas.

“ One

“ One hundred and fourteen cubic inches of nitrous gas were introduced into the large mercurial airholder; two small silk bags of the capacity of seven quarts were filled with nitrous oxide.

“ After a forced exhaustion of my lungs, my nose being accurately closed, I made three inspirations and expirations of nitrous oxide in one of the bags, to free my lungs as much as possible from atmospheric oxygene; then, after a full expiration of the nitrous oxide, I transferred my mouth from the mouth-piece of the bag to that of the airholder, and, turning the stop-cock, attempted to inspire the nitrous gas. In passing through my mouth and fauces, it tasted astringent and highly disagreeable; it occasioned a sense of burning in the throat, and produced a spasm of the epiglottis so painful as to oblige me to desist instantly from attempts to inspire it. After moving my lips from the mouth-piece, when I opened them to inspire common air, æriform nitrous acid was instantly formed in my mouth, which burnt the tongue and palate, injured the teeth, and produced an inflammation of the mucous membrane, which lasted for some hours.

“ As, after the respiration of nitrous oxide in the experiments in the last research, a small portion of the residual atmospheric air remained in the lungs, mingled with the gas, after forced expiration; it is most probable that a minute portion of nitrous acid was formed in this experiment, when the nitrous gas was taken into the mouth and fauces, which might produce its stimulating properties. If so, perhaps I owe my life to the circumstance; for supposing I had taken an inspiration of nitrous gas, and even that it had produced no positive effects, it is highly improbable that, by breathing nitrous oxide, I should have freed my lungs from it, so as to have prevented the formation of nitrous acid when I again inspired common air. I never design again to attempt so rash an experiment.”

We shall now recite some experiments of a more jocund

nature. "To ascertain with certainty," the author says, "whether the most extensive action of nitrous oxide compatible with life, was capable of producing debility, I resolved to breathe the gas for such a time and in such quantities as to produce excitement equal in duration and superior in intensity to that occasioned by high intoxication from opium or alcohol.

"To habituate myself to the excitement, and to carry it on gradually,

"On December 26th, I was enclosed in an air-tight breathing-box, (an engraving of which is annexed,) of the capacity of about nine cubic feet and half, in the presence of Dr. Kinglake.

"After I had taken a situation in which I could by means of a curved thermometer inserted under the arm, and a stop-watch, ascertain the alterations in my pulse and animal heat, twenty quarts of nitrous oxide were thrown into the box.

"For three minutes I experienced no alteration in my sensations, though immediately after the introduction of the nitrous oxide the smell and taste of it were evident.

"In four minutes I began to feel a slight glow in the cheeks, and a generally diffused warmth over the chest, though the temperature of the box was not quite 50° . I had neglected to feel my pulse before I went in; at this time it was 104 and hard, the animal heat was 98° . In ten minutes the animal heat was near 99° , in a quarter of an hour $99,5^{\circ}$, when the pulse was 102, and fuller than before.

"At this period twenty quarts more of nitrous oxide were thrown into the box, and well mingled with the mass of air by agitation.

"In twenty-five minutes the animal heat was 100° , pulse 124. In thirty minutes twenty quarts more of gas were introduced.

"My sensations were now pleasant: I had a generally diffused warmth without the slightest moisture of the skin, a sense of exhilaration similar to that produced by a small dose of wine, and a disposition to muscular motion and to merriment.

“ In three quarters of an hour the pulse was 104, and animal heat not $99,5^{\circ}$; the temperature of the chamber was 64° . The pleasurable feelings continued to increase, the pulse became fuller and slower, till in about an hour it was 88° ; when the animal heat was 99° .

“ Twenty quarts more of air were admitted. I had now a great disposition to laugh, luminous points seemed frequently to pass before my eyes, my hearing was certainly more acute, and I felt a pleasant lightness and power of exertion in my muscles. In a short time the symptoms became stationary; breathing was rather oppressed, and, on account of the great desire of action, rest was painful.

“ I now came out of the box, having been in precisely an hour and quarter.

“ The moment after, I began to respire twenty quarts of unmingled nitrous oxide. A thrilling extending from the chest to the extremities was almost immediately produced. I felt a sense of tangible extension highly pleasurable in every limb; my visible impressions were dazzling and apparently magnified; I heard distinctly every sound in the room, and was perfectly aware of my situation. By degrees, as the pleasurable sensations increased, I lost all connexion with external things; trains of vivid visible images rapidly passed through my mind, and were connected with words in such a manner as to produce perceptions perfectly novel. I existed in a world of newly connected and newly modified ideas. I theorised; I imagined that I made discoveries. When I was awakened from this semi-delirious trance by Dr. Kinglake, who took the bag from my mouth, indignation and pride were the first feelings produced by the sight of the persons about me. My emotions were enthusiastic and sublime; and for a minute I walked round the room perfectly regardless of what was said to me. As I recovered my former state of mind, I felt an inclination to communicate the discoveries I had made during the experiment. I endeavoured to recall

the ideas, they were feeble and indistinct; one collection of terms, however, presented itself: and with the most intense belief and prophetic manner, I exclaimed to Dr. Kinglake, ‘Nothing exists but thoughts! — the universe is composed of impressions, ideas, pleasures, and pains!’”

But the raptures here described are not equal to those experienced by some of the author's correspondents.

On the 18th of May, Mr. Tobin, having witnessed Mr. Davy's ecstasy, breathed six quarts of the pure nitrous oxide. “It is not easy,” says he, “to describe my sensations; they were superior to any thing I ever before experienced. My step was firm, and all my muscular powers increased. My senses were more alive to every surrounding impression; I threw myself into several theatrical attitudes, and traversed the laboratory with a quick step; my mind was elevated to a most sublime height. It is giving but a faint idea of the feelings to say, that they resembled those produced by a representation of an heroic scene on the stage, or by reading a sublime passage in poetry, when circumstances contribute to awaken the finest sympathies of the soul. In a few minutes the usual state of mind returned. I continued in good spirits for the rest of the day, and slept soundly.” But we are concerned to find, from the conclusion of this communication, that the oxide (after having been very often breathed) lost its exhilarating effects on Mr. Tobin, it rarely now producing, he says, “sublime emotions, or increased muscular power.” In Dr. Kinglake it produced a delirious, but highly pleasurable sensation. In a subsequent trial, however, “its agency,” he tells us, “was exerted so strongly on the brain, as progressively to suspend the senses of seeing, hearing, feeling, and ultimately the power of volition itself.” The accounts of Messrs. Thomson, Rogee, and Coleridge, are not altogether favourable. Giddiness, dimness of sight, palpitation of the heart, loss of sense, weakness of the limbs, and, in short, most of the symptoms that might be supposed to follow swallowing tobacco, or some other

other narcotic poison, were the effects produced in these gentlemen. Others again were thrown into ecstasies by it. They felt lighter than the air, became entranced, seemed without consciousness, and as if mounting to the top of the room; or were irresistibly impelled to use the most ludicrous and extravagant gestures, bursting into immoderate fits of laughter, and capering as ridiculously as a buffoon. But we have given enough, and more than enough, of this fantastical mummary.

We cannot quit this article without expressing our wish, that the experimenter, who appears to possess abilities, would exert his talents on objects more likely to prove beneficial to the public, as well as to himself; or that he will not promulgate any more of these reveries, as he may assure himself that the ladies will never patronise the inventor of a nostrum which excites transports so much superior to what they are able to impart.

ART. III. *Professor LODER's Journal für die Chirurgie, &c.*

(Concluded from page 62.)

3. *Account of a preternatural Delivery of Twins, followed by a violent Hæmorrhage; with Observations on similar Cases, and on the Extraction of the Secundines.* By Prof. MURSINNA.

THE case with which the author introduces his reasoning in this very long paper, is related by him as follows:

I was called, he says, to a woman in labour, and requested, at the same time, to bring instruments, particularly the forceps, with me. I found the patient under the hands of the accoucheur, who appeared to be in great agitation. On my inquiry, he informed me, that the waters had been discharged two hours since, in enormous quantity; that soon after the shoulder of the child had presented; but that the pains had been so violent, and had followed each other in
such

such rapid succession, that it had been impossible for him to introduce his hand, or even a few of his fingers, into the uterus, in order to turn the child.

I examined the water that had been discharged, and found the quantity to be astonishingly great. (It afterwards appeared, that the whole quantity discharged before and after delivery, amounted to about eight quarts.) The abdominal tumour was still uncommonly large; the lower extremities were so much swelled, that they appeared almost ready to burst, and the pains had entirely ceased.

I learnt that this was the woman's second pregnancy; that in her first she had had a natural labour, which, though attended with much pain, had been successfully accomplished; but in the present, all the circumstances had been far more unfavourable, and her general health very much impaired. The swelling of the lower extremities had appeared about the middle of the fifth month, and had gradually increased to that degree, that, as her time approached, she became quite unable to stand or walk, and was obliged to keep herself always either in a sitting or recumbent posture.

On a nearer examination, I found the left shoulder of the child actually protruded through the os uteri; the pains again violent, but not permanent. By repeated attempts, during the remission of the throes, I at length succeeded in introducing my right hand into the uterus, and extracted the child by the feet.

After this delivery, the second membranous bag immediately made its appearance. As, on account of the great distention of the uterus, I apprehended that if the second delivery should take place too speedily, the contraction would not be properly performed, and consequently a violent hæmorrhage ensue, I directed the woman to be laid in a horizontal posture, and to await the event of her pains without assisting them by her own efforts. The pains, however, entirely ceasing, and the patient appearing to be greatly exhausted,

hausted, I ruptured the membranes, from whence an uncommon quantity of water issued. Here likewise the child was in a preternatural position, as appeared by the falling down of the cord. I immediately introduced my hand, and found the feet on the left side of the uterus, which I extracted one after the other without great difficulty. With equal ease I turned the child, and completed the delivery without the assistance of natural pains. Both the infants were perfectly formed and healthy; though the second was considerably smaller than the first. As soon as the head of the latter had been extracted, and before it had been disengaged from the umbilical cord, the water and blood flowed out in a copious stream; and, in consequence of so sudden and violent an hæmorrhage, the patient fell into a deliquium animi, and was seized with general convulsions of the whole body.

I immediately poured cold water upon the external organs in general, and also sprinkled the face; upon which the convulsions ceased, and the woman recovered her recollection. Her hands, however, remained as cold as ice, and blood still flowed, though less copiously, from the vagina. I now dipped my hand in vinegar, and introduced it, together with the umbilical cords, into the uterus. This I found still very much distended, the greater part of the large double placenta still adhering to the fundus uteri. The introduction of my hand already produced a perceptible contraction of the uterus: and by slightly pressing its internal surface with one hand, and gently pulling the umbilical cord with the other, I increased its action to that degree, that it almost contracted upon my hand, and the placenta was entirely separated and brought away.

The mother, who was extremely exhausted, was now laid in bed in a horizontal posture; cloths soaked in vinegar and water were applied to the external organs of generation; no internal remedies were prescribed, except water-gruel, and she was advised to suckle at least one of her infants. After sleeping

sleeping six hours, she awoke very cheerful, almost free from fever, and the discharge of blood from the vagina had entirely ceased. The lower extremities and the labia externa pudendi were however still very much swelled, and the mammæ very large and turgid. Nothing was prescribed, except rest, proper diet, and an emollient enema every evening, and she was urged to begin soon to suckle her infants. All these directions were complied with, except the last. From mistaken tenderness to the mother, a wet-nurse was procured for the children.

On the third day after delivery, violent febrile symptoms supervened, with delirium and painful turgescence of the mammæ. I prescribed a solution of nitre and sal ammoniac, in chamomile tea, with lemon-juice and syrup, to be taken every hour, dilution with acidulated liquors, emollient injections, and fomentation of the mammæ. These remedies produced a copious sweat during the night, and in the morning all the symptoms were abated. The cleansings flowed moderately and without pain; but the abdomen was very tumid, and the swelling of the lower extremities as before. The evacuations by urine were very scanty. I directed dilution, bandaging of the lower extremities, and frequent injections.

On the fifth day, the symptoms appeared to be considerably relieved by this treatment. Urine was voided more copiously, though still red and thick; and the swelling of the legs was diminished. On the sixth, the same beneficial operation continued, and the patient made very little complaint. But in the evening, I was sent for in haste, and found her in the most alarming situation. An hour before my arrival, she had been attacked with violent rigors, which were immediately followed by an excruciating pain under the short ribs of the right side, attended with an inexpressible sensation of anxiety. Soon after she fell into a raging delirium, and in this state I found her. Her hands were ice-cold, her pulse small, quick, and tremulous. A cold sweat stood in large drops in her face, which exhibited a death-like aspect.

Though

Though these symptoms might at first seem to indicate an inflammation of the uterus, yet, upon considering all the circumstances of her pregnancy and delivery, I found reason for ascribing them to a different cause; namely, an obstruction of the sanguiferous and lymphatic systems of the abdomen, produced by the extraordinary distention of the uterus, and a debility of the whole intestinal canal, in consequence of the pressure sustained. Instead of letting blood, therefore, I prescribed a solution of Glauber's salt, manna, and tamarinds, emollient injections, and a blister to be applied to the part where the pain was felt, with a view of aiding the operation of the other remedies, and exciting the vital energy. A copious discharge of intolerably fetid fæces followed, which gave immediate and great relief to the patient.—Though the pain had almost entirely left her, she had no sleep during the night, which was attributed to the operation of the blister.

On the day following, the same remedies were continued. In the evening the scene of yesterday was repeated, with aggravated symptoms, so that the patient seemed to struggle in the pangs of death. I immediately ordered a grain of opium to be given, and repeated every half hour; the injections to be continued. A refreshing sleep of four hours, attended with a profuse sweat, was procured.

In the morning, I found the patient tranquil, but extremely weak. On examining the painful part of the abdomen, I found only a very small degree of distention remaining, without hardness or pain. Hence I concluded that the uterus had contracted its dimensions, and that the determination of the fluids to the part had been removed. I therefore kept up the suppuration, which the blister had produced, by proper applications. I also ordered a decoction of bark and valerian, and the body to be kept open by injections.—In the evening, instead of the violent symptoms of the two preceding days, extreme corporeal and mental imbecility, with excessive depression of the spirits, supervened. Two grains of opium

procured tranquillity, and some hours sleep, which towards morning was followed by a copious clammy sweat, after which the patient became more cheerful and invigorated. The remedies were continued. In the evening the same imbecility of mind and body, as on the preceding day, returned, and was relieved by the same remedies. Those attacks gradually abated of their violence, till within the space of eight days they ceased to recur, and the patient could sit up, though she was not yet able to walk. During this period, her body had been kept open by injections, and she had had frequent and copious evacuations of urine, which always gave her sensible relief, and contributed to diminish the swelling of the extremities, which gradually abated from day to day. Her appetite now began to improve, her sleep returned to its natural habit, and by a continued use of the Peruvian bark, with a moderate allowance of wine, the cure was completely, though slowly, effected. In the following year she was successfully delivered of another child, which she suckled herself.

The author now proceeds to point out what appear to him to be the most remarkable circumstances of this case, and to introduce his remarks upon them, together with observations on a variety of subjects connected with midwifery. Of these we shall extract what seems to us to be the most deserving of attention.

The case above related is particularly remarkable on account of the following circumstances: first, on account of the extraordinary distention of the uterus during gestation, whence originated the great accumulation of water, not only in the cellular membrane of the lower extremities, but also in the uterus, whereby the latter was so much distended, as to be incapable, both during and after parturition, to contract itself with the necessary speed and force. Secondly, on account of the violent flooding, which came on immediately after the birth of the second child, in consequence of the preternatural distention and debility of the uterus; and finally, on account

of the violent supervening symptoms, which, as I have observed, are always produced in a greater or lesser degree by violent floodings, whether during or immediately after delivery, and frequently followed by the most fatal consequences.

By such hæmorrhages, the vital energy is so much exhausted, as to be no more adequate to perform those natural functions, on which the health of the woman, after delivery, essentially depends; namely, the secretion of milk in the breast, and the discharge of the lochia through the vagina. If the physician can promote these secretions, and at the same time strengthen the system by proper diet and medicines, the consequences are not very alarming; whilst in the contrary case, convulsions and febrile actions of the system are always engendered, and generally occasion depositions of the fluids from which the milk ought to have been formed, in the abdomen, or the joints—sometimes also in the breasts, or in the brain, which seldom fail to produce the most dreadful symptoms, and not unfrequently even the death of the patient. After floodings, therefore, it is the duty of the physician to endeavour to promote the secretion of milk by the mammæ, at least during the first days after delivery, and especially the lochial discharge. The above-mentioned violent symptoms, consequent upon uterine hæmorrhages, take place particularly in cases where the situation of the placenta is either upon the internal os uteri, or near to it, on the cervix uteri. When this is ascertained to be the case, which can seldom be done before the eighth month of gestation, the woman must be enjoined to keep herself as quiet and free from motion as possible, to dilute with cooling acidulous drinks, and to observe a very strict regimen. The intestinal canal should also be kept clean by proper medicines and applications. By these precautions any flooding before delivery may generally be prevented. When the real labour pains come on, the accoucheur must proceed in the following manner. As soon as the orificium uteri is sufficiently dilated for him to introduce

one or more of his fingers, it will be in vain for him to attempt to stop the hæmorrhage; he must therefore accelerate the delivery by manual assistance. But even though the full period for delivery should not have arrived, and the os uteri (as often happens) be already so much dilated that a finger can be introduced, and the situation of the placenta discovered; in this case also the os uteri should be artificially opened, or rather gradually dilated. During this dilatation, a hæmorrhage does not, in general, ensue, provided the accoucheur merely widens the os uteri with his fingers, without at the same time separating the placenta and squeezing it together at the place of separation. He now proceeds gradually to introduce his hand through the os uteri, ruptures the membranes, and thus reaches the child. Whatever may be the position of the child, whether with its head presenting, or with some other part, (as, contrary to the general opinion, I have generally found to happen in these cases,) he immediately endeavours to lay hold of the feet, turns the child, and extracts it. The first of these operations is generally very easily performed in such cases, as the waters have not been discharged, nor indeed can they, since the orifice of the uterus is stopped by the hand of the operator; so that both the membranes and the uterus are completely dilated, and afford free room for laying hold of the feet of the child, as well as for turning and extracting it. If the pelvis be properly formed, neither the turning nor the extraction of the child is attended with the smallest difficulty, but the operation may be completed in such a manner as in all probability to save the lives both of mother and child.—As soon as the child has been delivered, the accoucheur, before dividing the umbilical cord, separates the placenta, which may easily be done on account of its nearness to the os uteri, and its being already for the greater part separated by the contraction which now takes place in the uterus.

After these observations the author gives some account of
a similar

a similar case, in which the placenta was attached to the os uteri, and which proved fatal both to the mother and the child. The remainder of the paper is occupied by a commentary on some opinions relative to the extraction of the placenta, advanced by Professor Weissenborn of Erfurt, in the *Journal der Erfindungen, &c.* which we shall pass over.

9. *Account of a laborious Delivery, in which the Child was extracted by the Head, and of a Laceration of the Perinæum thereby produced.* By Dr. MENTZEL, of Waldenburg in Silesia.

The author was called to a robust woman, 30 years of age, who by advice of the midwife had been already employed for twelve hours in assisting her labour pains by her own efforts. Four hours before his arrival the waters had been discharged. He found that the uterus was somewhat obliquely situated, the os uteri expanded to about the size of a crown-piece, very tense, hard, and unyielding, the pelvis well formed, and the head of the child large, with its diameter in an oblique position. The woman, who according to custom had been bled the preceding day, was very much exhausted by her exertions. Her pulse was irregular, and indicated irritation and tension of the arterial system.

An emollient vapour-bath, the recumbent posture inclining towards the left side, frictions with oil and laudanum, fomentations of the abdomen, and internally nitre, ipecacuanha, and opium, in small doses, procured some alleviation of the violent convulsive pains, but did not produce any farther dilatation of the os uteri. After some hours, the os uteri became somewhat more dilated; but it was still tense and unyielding. An attempt to dilate it gently by manual assistance, in order afterwards to extract with the forceps, did more harm than good, by the irritation which it gave to the parts, so that it was necessary to relinquish it. Six hours afterwards, the author found the woman in a posture for delivery, the parts of generation dry, hot, painful, and swollen, and the head in
such

such a situation, that only the last turn round the commissure of the pubis was required for its expulsion. Upon a more accurate examination it appeared, that the delay was owing to the almost immovable os coccygis being bent inwards towards the pubis, and to the hardness of the head of the child, which was very little elongated. On attempting to press the bone back with two fingers, the perinæum was stretched almost to laceration, so that no second attempt of this kind could be made. In order therefore to save the life of the child, and to relieve the mother, who was already extremely exhausted, it seemed necessary to have recourse to the forceps, though such an operation must inevitably have lacerated the perinæum. However, as effectual pains were still to be expected, the author resolved merely to disengage the head of the child from the situation in which it was wedged, with the forceps, and to leave the rest to nature, in order to avoid the danger of laceration. He then introduced Smellie's small forceps, without much difficulty, and directing the midwife to support the perinæum with her hand, he began to draw. At the second effort the head was loosened, and protruded farther beyond the pubis, but the perinæum became excessively tense. He now cautiously withdrew the forceps, supported the perinæum with his own hand, and waited for the natural pains, which soon returned, and expelled the head; but at the same time the perinæum was lacerated between the os coccygis and the left thigh, as far as into the rectum.

After the delivery no alarming symptoms appeared, except a slight syncope in consequence of exhaustion. During the course of the day the patient felt herself rather feeble, but in the evening she appeared cheerful. On the day following some febrile symptoms supervened; the discharge from the rectum was involuntary, but not that from the bladder. As the patient made no complaint, except of debility, and it was now high time to think of uniting the wound, the author proposed the suture, to which she agreed; and it
was

was fixed upon for the following day, as the third after her delivery.

Oct. 5. The author prepared to perform the operation. He placed the patient on her side, and found upon examination, that the rent had passed through the ligament of the pubis and the perinæum, extending nearly an inch deep into the anus. The lips of the wound were moist, not much swelled, and bled on being touched. An injection was administered, but produced no evacuation of fæces, and the lochial discharge was moderate. He now brought the lips of the wound to meet, and passed a crooked needle with a waxed thread through the inferior right lip, a few lines from the edge, and exactly at the angle which the perinæum forms with the anus. He then passed the needle upwards through the fibres of the sphincter ani and cellular texture, drew it out again through the left lip of the wound, a few lines from the edge, and fastened the ligature with a running knot, that he might be able to draw it tighter in case of necessity. The second stitch was made a few lines from the ligament of the pubis. Both the ligatures were now drawn tight, and the wound united very well. Instead of the common T bandage, a belt with straps, of a peculiar construction, was employed, and put on before the operation. Lint smeared with cerate and a light compress were applied to the wound, and properly secured by the straps of the belt.—The evening passed without any remarkable symptoms of fever; the patient had some evacuations of urine, but no inclination to go to stool; and in order that the latter might be kept off still longer, she received some opium.

Oct. 6. The bandage remained in its proper situation. The patient was carefully removed into another bed, the parts cleaned, as well as it could be done without extension of the thighs, and the bandage was drawn tighter. Oct. 7, She was again removed into another bed, and in the evening some symptoms of fever appeared. On the 8th it was necessary to
remove

remove the bandage entirely, as it had become loose. Every thing else was in its right situation, the wound looked pretty clean and had united well, the hindermost stitch was still fast, but the foremost had become loose, on which account it was drawn tighter. A thick mucilaginous matter flowed from the wound, and some pus was perceived about the stitches. An injection was carefully administered, which operated, and the bandage was again applied in the same manner as before. On the 11th an injection procured a discharge of hard fæces, without giving any pain to the patient, or any part of them passing into the vagina. The hindermost stitch was still fast, but the foremost had broke loose; the author therefore removed it entirely, and found the parts between the stitches completely united. He now ordered a more nourishing diet, with a view to restore the strength of the patient, who was very much debilitated. On the 13th it was necessary to remove the bandage, on account of a violent inclination which the patient felt to go to stool. The remaining stitch was now also removed. The evacuation was performed without pain and without any of the fæces getting into the vagina; and in the course of a few days the whole wound was completely united. The author applied two stripes of adhesive plaster to the perinæum, advised the woman to be cautious with respect to motion, frequently to dash cold water on the parts, and to use a nutritive diet with bark. She is at present in perfect health.

10. *Some Observations on the Floodings occurring during Gestation, in consequence of a Prolapsus Uteri; with a Plate representing such a Prolapsus of extraordinary Size.* By Dr. JÖRDENS, of Hof.

As the hæmorrhages occurring during pregnancy are symptoms of the utmost importance, and which require every attention on the part of the medical practitioner, and as the sources whence they originate are, at once, both very numerous, and involved in great obscurity, it will, doubtless, be agreeable to the reader to find here one species of this complaint

complaint elucidated by practical observations; and the more so, as the species of hæmorrhage here treated of arises from a source which is too often concealed by the patient, until it has already produced the most formidable consequences.

Barren women generally labour under a relaxation of the external and internal organs of generation, arising chiefly from the fluor albus; and in this state a prolapsus of the uterus is easily produced by those exertions of the body, in which the diaphragm and the abdominal muscles act as antagonists against each other — such as stretching, lifting, pressing, leaping, &c. In such cases, the ligaments of the uterus are either suddenly or gradually stretched to such a degree, as to render a reduction of the uterus into its natural situation impracticable.

In the unimpregnated state, a prolapsus is seldom productive of any very alarming consequences; but in pregnancy, when its weight is greatly augmented, and a topical plethora induced, symptoms frequently supervene, which, if left to themselves, especially in persons liable to spasmodic affections, may even endanger the life of the patient. In the sedentary or recumbent posture, the prolapsed uterus is not indeed protruded out of the vagina; but an acute burning pain is felt in the region of the pubis, which probably arises from the pressure made upon the neck of the bladder, and generally ceases when the patient walks about. By walking about for any considerable length of time, however, a sense of tension is produced in the hypogastric and lumbar regions, accompanied with frequent micturition; by which only a few drops of urine are voided at a time; and at length the uterus itself is protruded through the orifice of the vagina. This last symptom always excites various spasmodic affections and febrile rigors, during which the blood seems to be revulsed from all the external parts of the body; so that even varicose tumours, should there be any, disappear for the time. By the spasms, not only the neck, but likewise a considerable part of the body of the uterus,

is protruded between the thighs ; and, in consequence of the pressure of these parts against the bones of the pelvis, an hæmorrhage is produced, which continues with greater or less violence, in proportion as a longer or shorter space of time intervenes before the patient can lie down on her back. Sometimes, however, the uterus is protruded so suddenly, that she is scarcely able to walk to her bed, and a very dangerous flooding ensues. Under these circumstances the fœtus becomes very restless, and pressing downwards increases the painful sensations in the abdomen, so as sometimes even to induce complete labour pains. After the pains have remitted, the internal os uteri is found to be constricted : and it appears as if in consequence of the pressure upon the neck and middle part of the uterus, the hæmorrhage proceeded only from the labia of the os externum. It is very remarkable, that this loss of blood, which in many cases takes place every week, sometimes even daily, does not affect the nutrition and growth of the fœtus : so that it has been known, that a woman, who had got a prolapsus during her second pregnancy, was subsequently delivered of seven stout and healthy children.

All the occasional causes of prolapsus uteri, in general, contribute likewise to produce that protrusion which occurs during pregnancy, and of which flooding is a concomitant symptom. These causes are, the lifting of heavy burdens, coughing, sneezing, straining at stool, &c. Whatever distends the abdominal viscera has also a tendency to protrude the uterus out of the pelvis ; thus it is sometimes protruded in consequence of using flatulent food ; also by distention of the urinary bladder, as was the case with a woman, in whom the drinking a few glasses of water was always sufficient to induce a protrusion of the uterus. Finally, debility and relaxation of the external and internal parts of generation is apt to occasion a frequent protrusion of the uterus. The author recommends to persons in this state, that they should abstain from venery during the period of pregnancy, and at other times

times never indulge it in the morning; also, that as long as the lochial discharge continues, they should confine themselves entirely to their beds.

The only indication of cure, during gestation, is the reduction and retention of the prolapsus by means of a proper pessary. In the unimpregnated state of the uterus, the application of cloths dipped in a cold decoction of oak bark with steel, as also a semicupium of chalybeate waters, are of great effect in strengthening the relaxed parts, so as even, in course of time, to render the pessary superfluous. The author mentions also the operation by incision, as a means of effecting a radical cure.

A plate is annexed, which represents a prolapsus uteri, as it appeared in a woman 39 years of age, in the eighth month of her fourth pregnancy. The prolapsus had originated eighteen years before, in consequence of her lifting a heavy burden: when first discovered, it was about the size of half a pigeon's egg; but gradually increased to a much greater magnitude, by reason of her assisting her husband in his employment as a smith: nevertheless, she had since then been successfully delivered of two children; but of the third she miscarried. After her third labour she perceived several knotty tumours about the os uteri, the largest of which was about as large as a hazelnut; and, upon occasion of her straining at stool, it burst open and left a scar behind. During the latter part of her fourth pregnancy she was relieved, by the use of a pessary, from the hæmorrhages with which she had formerly been frequently attacked, and was in due time delivered of a healthy male child.

II. *Observations on the pulmonary Test (Lungenprobe), especially that of Ploucquet.* By Professor METZGER, of Königsberg.

Ploucquet's test depends, as is well known, upon the principle, that by the augmentation of the quantity of blood in the lungs, consequent upon the first action of inspiration, this organ is rendered heavier than it was before. The idea of resting the

decision of the question, Whether the foetus have, or have not, respired? upon the augmentation of the absolute weight of the lungs, as well as upon the alteration of its relative weight, (in comparison with that of the whole body,) is certainly very ingenious, especially as this difference of weight is found to be very considerable. All depends here upon ascertaining how far this method is practicable, and especially whether we can apply it in those cases in which the hydrostatical pulmonary test, as improved by Professor Metzger and others, is inadequate. That this is not the case, is what Professor Metzger endeavours to prove in this essay. He observes, that when the lungs have been artificially inflated, or when air has been generated within them by the process of putrefaction, as also in the asphyxia neonatorum, (when the child dies soon after birth, without having ever exercised the function of respiration,) cases in which the hydrostatical test seems to be the least decisive, that of Ploucquet is not more so. We may, however, remark, that lungs, which, without having ever respired, have been artificially inflated, (perhaps with a view to the resuscitation of the foetus,) will not exhibit that alteration of their positive and relative weight, upon which Ploucquet founds his test, with respect to such lungs as have already performed that function. The same observation applies also to those cases in which air has been disengaged within the lungs by means of putrefaction.

12. *Medical Report concerning a complicated Case of Homicide, &c.* By Professor GRUNER, of Jena.

Unless we were to transcribe the whole of this very long Report, it would be impossible for us to give our readers such an account of it, as might enable them to form an opinion for themselves of the case in question, or of the accuracy of the author's reasoning upon it.

The remaining part of this volume contains several short medical reports and observations; with articles of news, and a list of recent publications; which it is unnecessary for us to particularize.

ART.

ART. IV. *A conscious View of Circumstances and Proceedings respecting vaccine Inoculation, &c. &c.* Octavo. 76 pages.
HURST, London. 1800. Price 2s.

WE do not think so ill of the favourers of vaccine inoculation, as to believe their anger would be excited, or that they would conceive an ill opinion of any writer who should candidly examine the subject, or suggest any plausible reasons why the practice should not be encouraged; on the contrary, they seem rather to court inquiry, and to wish to hear what arguments or facts may be alleged against its continuance. The writer of the little work before us need not, therefore, on any apprehension of that kind, to have withheld his name from the public, or to have apologized for his performance, provided he had pursued his inquiry, and offered his objections, with that candour which he seems *conscious* the public, for whose benefit he professes to have written, had a right to expect. But this is not the case; the author attempts rather to laugh his readers into a disbelief of the value of vaccine inoculation, than by facts or arguments to prove its inefficiency.

After some cautions to milkers, admonishing them not to handle the teats of the cows too roughly, he says, “Now, this oblation being ended, it might not be amiss, perhaps, to inquire a little further into the nature and extent of this most horrible contagion; but which, with all its wide-spreading malignancy, was, I fancy, never yet known to affect either the stately ox, the maiden heifer, or even the sucking calf. Neither, as far as my inquiries have gone, has any suit ever yet been instituted by the lordly bull against his lady cow for her impurities: nor have the swine, so prone to disease eruptive, been heard to grunt out one single complaint on the alarming occasion; but found contentedly to swill their wonted portions of whey and butter-milk in snorting gratulations.”

As the author evidently conceived this to be wit, we would not withhold it from our readers, though we do not see the application

application so clearly as he doubtless does ; but this may be more owing to our want of comprehension, than to any deficiency in the passage quoted. The author's talent is not confined to raillery or humour ; he is sometimes pathetic, and at other times attempts reasoning on this subject : a specimen of each we shall lay before our readers ; and to prevent their mistaking the one for the other, shall give each of the passages its appropriate title.

** Specimen of the Pathetic.*

“ If I am not mistaken,” the author says, “ the first experiment made in this country with the variolous matter, was, by permission of government, (but at the same time not without the consent of the parties,) on criminals whose lives were forfeited. Whilst now (and which too long since, alas ! has been the case) the weak, the credulous, the poor dependant, nay, even the pregnant female, and the helpless, unoffending infant, have been marked out as victims to experimental enthusiasm or interested pursuits, without the consolatory aid of one merciful defender. Great God ! that such abominable practices should have been so long tolerated ; for I do most solemnly declare, that my rooted indignation to it has been almost primæval with, and in no wise abated since, the first hour I saw, or at least thought I had perceived, its baneful tendency. Nor have I, after a long and close investigation, witnessed any other than what has appeared to me to be a succession of accumulated evils to my fellow-creatures, in consequence of the extensive and indiscriminate practice of inoculation.”

Specimen of Reasoning.

“ It is not very many years since an attempt also was made to inoculate for the measles ; but the thing was found untenable, and quickly laid aside ; whilst now it would seem as if we were intended to be gored or goaded into the present business. To be sure, a polled cow or two may chance to be found amongst a herd ; but then, I am told, they can kick confidently

foundedly hard; and a broken limb from the heel of one of them, might be as dangerous and unpleasant as a wound or a toss from the other. Yet, more seriously speaking, I trust and hope that neither his most gracious Majesty, (whom God long preserve,) notwithstanding Dr. Jenner's dedication; nor his Royal Highness the Duke of York, notwithstanding the patronage he has been induced to give it, will lend their further countenance to this cow-poxing business, until they shall have *satisfactory proofs, not only of its present perfect innocency, but also of its future efficacy*, in completely answering the purposes for which it seems to have been intended,—and which time alone can be able to shew. No great boon to ask, surely, for the welfare of mankind! and the only object the author of the present View professes to have at stake. But when he sees an establishment start up like a mushroom, and hears that a whole regiment has been punctured, and probed, and threaded with cow matter, he looks about him with astonishment, and his only conjecture is, what may come next?"

But if *no* experiments were to be made, or if numerous and multiplied experiments were not to be tried, we would ask, How should the Duke of York, or the public, ever attain *satisfactory proofs either of the present perfect innocency, or future efficacy*, of the cow-pox? The more widely the inoculation is extended, the sooner and the more completely will the delusion (if it is a delusion) be discovered, and an end put to the practice. The author, however, is equally averse to inoculating with small-pox matter: he thinks the introduction of that practice has contributed to perpetuate the disease among us; for it would otherwise, like the plague and sweating sickness, have been long since weakened or exterminated, at least in this country. But so long as an intimate commerce shall continue between this country and all parts of the world, there seems little probability of this event taking place. The author thinks the foolish dread of the small-pox, which is kept up, he says, by interested persons, is the principal cause of its malignity.

But

But if fear, and we allow the fact, adds to the malignity of the disease, then the persons who have been inoculated with vaccine matter, believing themselves to be exempt from the small-pox, and consequently being without fear on that account, will, if they should afterwards take the disease, have it in a milder manner than they otherwise would; and thus, at least, the vaccine inoculation may prove highly advantageous.

On the whole, this little piece is written with too much acrimony, and the author appears to be too strongly under the influence of prejudice to expect what he has advanced against vaccine inoculation should occasion any diminution in the practice. We admit, with him, that time alone can shew its absolute merit; but we cannot help thinking the evidence already adduced is sufficient to justify an opinion, that, even although it should not infallibly guarantee the constitution from the attack of the small-pox, it is of too mild a nature to leave any lasting impression unfavourable to health.

ART. V. *A concise View of all the most important Facts which have hitherto appeared concerning the Cow-pox.* By C. R. AIKIN, Member of the Royal College of Surgeons in London. Octavo. 102 pages. PHILLIPS, London. 1800. Price 2s. 6d.

THIS is a judicious compendium, and well calculated to supply the place of the numerous interesting publications that have appeared on the subject of the cow-pox; particularly to practitioners, who, living at a distance from the metropolis, or from other circumstances, do not find it convenient to purchase a multiplicity of books. To a concise and accurate account of the different observations on this subject, and a clear view of the result of the several experiments that have been made with the view of ascertaining the nature of the disease, and the advantages likely to accrue from instituting a general inoculation with cow-pox matter instead of the small-pox,

pox, the author has added a coloured engraving, representing the cow-pox pustule in its different stages.

As the author does not profess to have made any discoveries, or to impart any thing new on the subject, it will not be necessary to give an analysis of the volume; we shall only, therefore, add, as a specimen of the manner in which it is executed, the concluding chapter, in which he has answered some objections that have been made to vaccine inoculation, and shewn, in a decided manner, its advantages over inoculation with variolous, or small-pox matter.

“ A question,” he says, “ of considerable importance has been suggested, arising directly from a review of the foregoing subject: namely, whether the cow-pox is not originally the parent disease to the small-pox, whilst the observed differences only depend on the length of time in which the latter disorder has passed through various constitutions in the human race.

“ The great similarity in the operation of each infection, and especially the change that the one makes upon the human constitution in rendering it either partially or entirely insensible to the power of the other, (a fact without example in the history of physic,) would imply at least a very intimate resemblance in the nature of each. If this question were answered in the affirmative, the immediate inference would be, that, by conveying the vaccine disease into the human constitution, it would in a series of years, through imperceptible gradations, at length assume the variolous nature. Hence it would happen, that the inoculated cow-pox would gradually become a more severe disorder, and would at the same time be communicable by contagion, and no longer be the mild and safe disease that we now find it. Experience, however, as far as it has hitherto been carried, does not shew any approach to this state: the vaccine inoculation continues to promise as many and great advantages as it at first held out; the pustular cases (which are the most severe) are not more frequent than formerly, but

on the contrary, we are now generally able to avoid them, by removing the causes from which they originate.

“ We may therefore safely continue the vaccine inoculation, without any probable prospect of finding at last that we have only been introducing the variolous infection under a different form : but, even should this happen, there can be no risk as to the security from subsequent contagion of the small-pox, (the ultimate end of inoculation,) since it cannot be supposed that this security, which even at present is complete, should be at all diminished when the inserted disease approaches to a variolous nature. The possibility of such an event, however, should be an inducement to attend accurately to the disease in the cow, that, if necessary, we may at any time resume the original infection from the fountain-head.

“ It has been often remarked, and is confirmed by constant experience, that the small-pox, long after all its immediate effects have disappeared, is apt to leave the constitution peculiarly liable to suffer from scrophula, where a tendency to this disease existed in the body before the introduction of the small-pox. Therefore, although variolous inoculation will not convey the seeds of scrophula along with its own infection into a sound habit of body, it may be the cause of considerable trouble during the early part of life, in certain instances. The cow-pox has not been found to resemble the small-pox in this respect ; whether from its great mildness, or from some more obscure cause depending on a peculiarity of its nature, we are not able to determine : but, if the daily accumulating observations that are making on this disease continue to confirm this important circumstance, it will be an additional reason for its adoption in preference to the small-pox.

“ The cow-pox in any stage or kind of the disorder may be pronounced with confidence not to endanger life to any degree which can be estimated. In the inoculated small-pox, and much more so in that given by contagious effluvia, a
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certain portion, varying according to the season of the year, and the mild or malignant nature of the disease, are found to fall a sacrifice to its ravages. In common inoculation, this proportion is very small, so small indeed, as, where it occurs, to be generally an unlooked-for event, at least with the friends of the sufferer. Still, however, the risk to life may be estimated, and will always be felt in the anxiety of the parent. With the cow-pox the hazard is not appreciable. One solitary instance of a fatal event makes a very small ratio with the successful cases already on record, and the daily accumulation of these latter (which alone occur at present) renders the disproportion so small as almost entirely to extinguish every idea of danger.

“ This circumstance, it may be presumed, may have a very important operation on the minds of those who have long uniformly and consistently opposed on religious grounds the introduction of the inoculation of the small-pox. To these, this widely-diffused practice has only been the source of mischief by extending this contagious distemper on every side and in every corner of the kingdom ; and, being withheld from enjoying the immediate benefit which it offers, they have not reaped an adequate recompense from the more indirect advantage of a better knowledge which inoculation has led to in the general treatment of the disease.

“ To those, therefore, who hesitate to endanger human life by a voluntary disease, however small the risk, and however great the promised advantage, the vaccine disease should stand in peculiar estimation, as it offers all the benefit which the variolous inoculation is known to ensure, and removes to an extreme distance every hazard of a fatal event.

“ If future experience shall continue to confirm the important advantages which the cow-pox now offers to the human race, and if the establishment of this inoculation, so happily introduced to the world by Dr. Jenner's able investigation, shall continue to advance with the rapid progress that has hitherto attended its steps, it will soon become an

object of sufficient magnitude for universal attention, in every part of the world that is constantly experiencing the ravages of the small-pox; and the extirpation of this formidable malady from every civilized country will no longer be a very impracticable undertaking.

“ That the vaccine inoculation is peculiarly calculated to bring about this most desirable end, appears from a review of its leading features. Were even the advantages which it offers much less perfect than we find them to be, were it only to secure from variolous contagion the greater part of those inoculated with it, or only to exercise its preservative powers for a certain number of years, the mere circumstance of not being itself communicable by contagion might still render it worthy of notice in any general and national plan for extirpating the small-pox, though it would then no longer recommend itself to individuals.

“ But, since it possesses all the security to the infected person which the inoculated small-pox affords, it may be an additional motive of preference with many, that whilst the welfare of the individual is eminently consulted by employing the vaccine infection, no contagion is spread abroad of a disease, which, when acquired by contagion, is one of the most distressing in its symptoms, formidable in appearance, and doubtful in event, of any to which the greater part of mankind are exposed.”

ART. VI. Professors PFAFF and SCHEEL's *Nordisches Archiv*,
N° I. & II.

(Continued from page 21.)

4. *Experiments and Observations on the Influence of the Galvanic and some chemical Agents upon vegetable Life.* By Professor TREVIRANUS, of Bremen.

THE author gives a circumstantial detail of eleven experiments, made by himself, which tend to prove that Galvanism,
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and various chemical agents, possess a very considerable influence over the phenomena of vegetable life; but as the subject of this paper is not immediately connected with the scope of our Magazine, any abridgment which it might admit of would be too prolix for insertion.

5. *Experiments on the Influence of Opium and Belladonna on the Lungs of amphibious Animals; with some Observations on the Galvanic Agent.* By the same Author.

The seven experiments here related do not differ materially in their result from innumerable others of a similar kind already in the hands of the public; we shall, therefore, pass them over, and proceed to the next article.

6. *Cases of Midwifery.* By M. MAAS, Army-Surgeon.

1. Case of a difficult head-delivery, during which the mother was in a state of complete insensibility.

The author was called, about ten in the evening, to a woman in labour, in order to deliver her, the labour pains having ceased. He found her in bed, in a state of complete insensibility; and a few moments after his arrival she was seized with violent convulsions, which lasted a full quarter of an hour, and from which she relapsed into her former insensible condition. The patient was 30 years of age, of a very delicate habit of body, and this was her first labour. The waters had been discharged already at eleven in the morning, and since that time she had been alternately seized with convulsions and insensibility, which, since six in the evening, had greatly increased, so that at length she exhibited not the smallest signs of recollection. On examination, the head of the child was found situated transversely in the cavity of the pelvis, and so much tumefied as to render it very difficult to ascertain its position with accuracy. During the examination the pains were renewed, followed again by convulsions.

About twelve ounces of blood were drawn from the arm of the patient, and she received, by small doses at a time, a mixture, consisting of twenty drops of Sydenham's laudanum,

and the same quantity of Hoffman's liquor anodynus; after which the forceps was introduced; but upon beginning to draw, the spasms were immediately renewed, which compelled the operator to desist from proceeding further, and wait a more favourable opportunity. After a space of about ten minutes, when the spasms had again remitted, the author proceeded in his operation, and delivered his patient of a stout male infant. The whole body of the infant was of a blue colour, and at first shewed no signs of life; but by suffering half a tea-cupful of blood to flow from the umbilical cord, before tying it, and the application of a warm bath, animation was soon restored. No considerable hæmorrhage supervened upon the delivery, and the placenta was spontaneously expelled within the space of half an hour. The spasms did not return; but the insensibility still continued, during which the patient, however, talked in a very incoherent manner. A solution of camphor in sp. nitr. dulc. with mucilage of gum Arabic and musk, was prescribed. The patient lay in her former state till eight o'clock the next morning, when she awoke from her insensibility, as if from a dream, called for some drink, and, having heard the cries of the infant, inquired what child it was? When she was told that it was her own, she could not believe it, till she had convinced herself by examining the state of her own body. She asserted, that she recollected nothing of her delivery, or of what had passed during the last twenty-four hours. She now made no other complaint except of weakness; and during the remainder of her confinement she found herself, upon the whole, tolerably well, considering the preceding circumstances: however, she had still several slight spasmodic attacks, which were chiefly relieved by injections with assafoetida. Two years afterwards the same woman was a second time delivered, without any circumstances of peculiar difficulty; but immediately upon her delivery violent convulsions supervened, which terminated in death.

2. Case of a delivery of twins attended with similar circumstances.—A poor woman was seized, during her fourth labour, with raving madness, from which she fell into an apoplectic state, and in this state she was delivered of twins, one of which was still-born, and the other died an hour after its birth. The mother still remained in the apoplectic state, when the author, having prescribed laudanum, returned home, thinking it impossible that she should survive. During four weeks from that time he heard no more of her, till, to his great astonishment, she came herself to his residence (a distance of nine miles,) in good health and spirits. She related, that she had not recollected a single circumstance of her delivery; but when, upon awaking in the evening, she was told that she had been delivered of twins, she could not believe it till they were shewn to her. From that time she had found herself so well, that she thought it superfluous to send the author any account of her health.

7. *Remarkable Case of a Family poisoned with Arsenic.* By Dr. NISSEN, of Segeberg.

A pedlar, who came to the town where the author resides, vended amongst the inhabitants a powder for poisoning mice, and which, he affirmed, proved fatal only to such animals as were littered blind; but could do no sort of injury to mankind. A quantity of this powder was purchased by a family in the town, and deposited in the larder, for the purpose of driving away the mice. One of the maids having, by mistake, used some of this powder, instead of sugar, in making soup, nine persons, who ate of it, were seized with all the symptoms usually produced by the poison of arsenic. The author, who was called in, exhibited, as a counter-poison, the solution of soap recommended by Hahnemann, together with hepatic water mixed with cream; also clysters, fomentations, &c. Under this treatment all the persons who had taken the poison recovered, except an old man, 70 years of age; who, though he had at first appeared to be less affected by it than the

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the rest, suddenly grew worse, and, in spite of all the remedies that could be used, died. On opening the body, it appeared that this person had laboured under an incarcerated hernia, which he had concealed during his lifetime. From a long detail and comparison of the appearances on dissection the author concludes, that his death ought to be attributed to the combination of this disease with the effects of the poison—not to the last alone. A chemical examination of the powder proved that it actually contained arsenic.

8. *Short Accounts and Extracts from Letters.*

1. *Some Experiments on artificial Cold.* By M. SUERSEN, Apothecary at Keil, and Professor PFAFF's Remarks on these Experiments.
2. *A Case of long Abstinence from Nourishment.* A Letter of Dr. JAHN, Physician at Heide, to the Editor.

As this case is extremely remarkable, we shall insert it entire. The author says: "The case concerning which you inquire, was that of the son of a merchant resident at this place. The boy (then 12 years of age) was taken ill on the 3d of February last year. Spasms, pains," (it is not mentioned in what part of the body the pains were,) "and loss of appetite, were the first symptoms. After the lapse of a fortnight, the spasms having been aggravated into attacks of real epilepsy, I was called in to the patient. Having employed, for the space of four weeks, every remedy that I thought likely to be of advantage, by which the symptoms were sometimes alleviated, but the patient's condition, upon the whole, not bettered, Dr. Weber was applied to, who sent a prescription for a decoction of valerian, &c. The boy, contrary to my expectation, took this medicine without reluctance; but he now lost all inclination for food, and received no sustenance whatever: dried prunes, the only food which he had taken for some time past, he now loathed. He lost his speech and reflection, and appeared to be actuated by an extreme degree of malice; so that when his attendants, even those to whom he had before been

been most attached, approached him, he struck at them; and now a symptom, which to me seemed very remarkable, made its appearance. Though he never spoke, and seemed totally deprived of consciousness, he sung the airs of several popular songs perfectly in tune. From the 4th of April to the 8th of June, *i. e.* upwards of sixty days, he abstained entirely from nourishment, a circumstance which, to me, appeared of the most extraordinary kind. I have frequently known patients to abstain from food for the space of fourteen, nineteen, and as far as twenty-three days; nay, I have even known an instance of a gouty person, who ate nothing for the space of thirty-five days; but who, however, drank two glasses of small beer daily. But to return to the case in question. June 4th, the patient was attacked with very violent epileptic convulsions, and at four o'clock in the afternoon he suddenly recovered the use of his understanding; his consciousness, good humour, and appetite for food, returned; though he had lost the use of his limbs, which had suffered by the violence of the convulsions. The flesh-brush and medicated frictions were prescribed, and applied with good effect; also bathing in water with soap dissolved in it, and the sea-bath; so that he is at present as healthy and cheerful as it is possible for a boy to be."

The editor says, he cannot omit this opportunity of calling the attention of the public to the case of a girl in the bishopric of Osnaburg; of which a short account has been inserted in Hufeland's *Journal of the Practice of Medicine*, and a more ample one lately in a separate publication. He affirms, that he has himself seen and examined the girl, who, at that time, had already lived a year and a half without taking any meat or drink whatever; and the result of his investigation has been, that no fraud was practised in this case. Our readers will recollect, that we have given a particular account of this case in our second volume, page 284; and that we have lately announced a detection of the fraud practised in this instance, of which Professor Pfaff does not seem to be aware.

9. *Literature of natural Philosophy and Medicine in the North*, containing short notices of works lately published on those sciences in the northern part of the continent of Europe.

ART. VII. *The Plague not contagious: or, a Dissertation on the Source of epidemic and pestilential Diseases; in which is attempted to prove, by a numerous Induction of Facts, that they never arise from Contagion; but are always produced by certain States, or certain Vicissitudes of the Atmosphere, &c.* By CHARLES MACLEAN, M.D. Member of the Corporation of Surgeons of London; and, for several Years, a Practitioner of Medicine in the East Indies. The Second Edition, with Additions. Octavo. 49 pages. MURRAY and HIGHLEY, London. 1800. Price 2s.

“IN January 1797 this dissertation was first published in Bengal; it has since undergone several republications,” the author says, “in other countries: but the arguments it contains against the existence of contagion, in epidemic and pestilential diseases, if a judgment may be formed from public documents, do not seem to have yet produced general conviction.”

This will not appear wonderful, perhaps, as the author acknowledges his belief, that the plague is not a contagious disease, rests only on a theoretical opinion which he has had no opportunity of confirming by practice or observation. He is, however, very angry at this want of faith in the public, and in the governments of Europe, and that they should continue to oblige vessels coming from places where the plague, or other supposed infectious complaints, are raging, to perform quarantine. For our parts, we should think the persons intrusted with the government of this country criminally culpable, if they should suffer any relaxation to take place in those salutary regulations, which appear to have preserved us for a century and a half from the ravages of the pestilence,

on the mere suggestion of their inutility by any philosopher, however enlightened. They would be particularly so, at this time, as our author informs us persons are actually gone to Constantinople to investigate, by experiment, how far the plague is contagious, and what are the best methods of curing that disease. The matter being *sub judice*, we shall decline giving our opinion upon it; for the present only observing, that the stoutest deniers of the contagious nature of fevers are obliged to acknowledge, that whenever they appear in camps, on board of vessels that are crowded with men, in hospitals, or jails; if the sick persons are not removed from the general mass of the men, or so separated as to prevent intercourse with them, the disease invariably becomes general; with these precautions, if timely taken, its ravages are usually confined to the persons first seized, or infected. We acknowledge, however, there are some ingenious arguments on the subject contained in this little pamphlet; but when the author tells us, that diseases truly contagious, as the small-pox, invariably infect all persons coming within the sphere of their activity, unless they are under the influence of some more powerful disease; we are sure the assertion is by much too general; as we are, that the practice of giving four grains of opium, and eight grains of calomel, every two, three, or four hours, in fever and dysentery, of a certain degree, and in larger doses, in more exalted states of those diseases, will not be resorted to by physicians who have a proper regard for the lives and welfare of their patients, however clearly such doctrine may be deduced from the theory, or supported by the practice, of the late Dr. John Brown. An account of some cases treated in this manner was published by our author, in his "View of the Science of Life," &c. and animadverted on by us, with proper severity, we believe, in the first volume of our Review, p. 342. As the doctrine is here revived, and attempted to be justified and supported, we have thought it right to notice it again.

ART. VIII. *Comparative View of the Theories and Practice of Drs. Cullen, Brown, and Darwin, in the Treatment of Fever, and of acute Rheumatism.* By HENRIQUE XAVIER BAETA, M.D. Octavo. 55 pages. JOHNSON, London. 1800. Price 1s. 6d.

IN a short preface, in which the author shews the qualifications necessary for appreciating the value of Dr. Darwin's system, which, he intimates, few of those who object to it possess, he reproves with uncommon acrimony the author of the "View of the Science of Life *;" not for his profusion in the administration of opium and other stimulants, but for his want of reverence for the Zoonomia, and for the preference he gives to the Brunonian system. In respect to ourselves, we must be content to rank with those "who have not sufficient powers of mind to comprehend the system" here so warmly defended; for although we have read the Zoonomia with considerable attention, yet we are not able to account for all the symptoms of fever by means of it, nor to deduce so clearly the indications of cure from it, as our author thinks he has done. We shall not, however, enter into a controversy with him on this subject; but content ourselves with acquainting our readers, that the little tract before us contains an abridged but pretty clear view of the doctrines of Drs. Cullen, Brown, and Darwin, on fever and on acute rheumatism, and may prove an agreeable compendium to those to whom it may not be convenient to possess the volumes from which they are taken. There are also a few cases of fever and acute rheumatism treated by the different methods those doctrines would be supposed to indicate, with a comparative view of their excellencies and defects.

* Dr. Maclean tells his readers, the critics in England are "remarkable for their indecency, total want of candour, and total ignorance."

Introduct. Dissert. p. 4.

ART. IX. *Some Account of St. Bartholomew's Hospital, London.*

WEST and HUGHES, London. Duodecimo. 22 pages.

Price 6d.

THE author describes the hospital, gives the names and situations of the wards, and the purposes to which they are dedicated; the names of the physicians and surgeons, with their times of visiting patients; the number of officers and servants attending; the diet and management of the sick, &c. The whole is, however, very indifferently performed, and only leads us to regret that some intelligent person does not give a more ample account of the foundation, successive enlargement and improvement, of this and the other royal hospitals. Such a work, well performed, would be received by the public with avidity.

ART. X. *A comparative Statement of Facts and Observations*

relative to the Cow-pox; published by Drs. Jenner and

Woodville. Quarto. 43 pages. Low, London. 1800.

Price 5s.

THE author of this little work examines minutely the several facts and observations on the subject of the cow-pox that have been published by Drs. Jenner and Woodville, as well as some collateral evidence on the points in which their accounts were at variance. These relate, first, to the origin of the cow-pox. Dr. Jenner, from such observations as he had been able to make, supposes that the disease does not originate in the cow, but that it takes its rise from the humour issuing from the greasy heel of the horse, and communicated to the cows by the persons milking them. Dr. Woodville, on the contrary, from actual experiment, by inserting the ichor from the horse into the nipple of the cow, finding no such produce,

produce, is inclined to believe that the disease originates in the cow.

It does not appear, however, that a number of cows feeding together communicate the disease to one another; or that it is necessary to separate them, in order to prevent those not affected in the first instance from being afterwards infected; it is sufficient for that purpose, that the clean cows be not milked by the persons who milked the infected cows. It is also to be observed, that no pustules appear on any part of the cow, except on the nipples; and that cows not in milk do not take the disease, such cows not being handled in those parts by the milkers. From these circumstances, and from some new facts that have been adduced, of which Sir Christopher Pegge's letter, published in our twenty-first Number, affords specimens, it seems probable, however incongruous it may appear, that this wonderful disease does not originate in the cow. Another point on which the accounts given by Dr. Jenner and Dr. Woodville were not in accord, is, relative to the power of the cow-pox poison of producing pustules in the manner of the small-pox on all parts of the body; and, which seemed dependant on that, its power of propagating itself by effluvia. In the first series of experiments on the subject instituted by Dr. Woodville, a large portion of the patients had pustules on all parts of the body; in a small number of these the pustules were confluent, and in one or two instances persons were infected with the disease by coming into contact with them. As nothing of this kind had been observed by Dr. Jenner, the business was carefully investigated, and it appeared that the persons who had eruptions scattered over their bodies were those who had been inoculated in the Small-pox Hospital, and had consequently been contaminated by the small-pox effluvia, or those inoculated from them; and, therefore, that the disease those persons were infected with was the small-pox.

In the main point, however, the accounts of these gentlemen,

men, as well as of numerous other practitioners, are agreed, viz. that persons infected with, and passing through the cow-pox, are rendered incapable of receiving the infection of the small-pox; it is also now established and confirmed, that the cow-pox is an almost infinitely milder disease than the inoculated small-pox. From this power in the cow-pox of guaranteeing the constitution from the small-pox, it seemed probable, and has been asserted, that they are the same disease, only differently modified; but the following experiments and observations by Dr. Woodville prove that they are distinct diseases:

“ *Experiment 1st.* He took matter from the eruptive or variolous-like pustules on the body of those who were under the cow-pox inoculation: with this matter he inoculated sixty-two persons; it produced the variolous-like eruptive pustules in fifty-seven, and among those who were inoculated from any of these fifty-seven, it produced pustules in the same proportion.

“ *Experiment 2d.* He took matter from the cow-pox pustule on the arm of Ann Bumpus, who had three hundred and ten variolous-like pustules on her body, which suppurated. It was sent into Gloucestershire, where, under the care of Dr. Jenner and Dr. Marshall, it did not in any instance excite variolous-like pustules.

“ *Experiment 3d.* Dr. Woodville took the matter of cow-pox and that of small-pox, and rubbed them together. These poisons, thus blended, produced either the cow-pox or the small-pox. Whichever chanced to take the lead preserved, during its progress, its peculiar character and specific virus uncontaminated by the action of the other, with which, previously to the inoculation, it had been intimately combined.

“ *Experiment 4th.* He inoculated with the virus of cow-pox, and that of small-pox, separately; but so near to each other, that the inflammation surrounding the pustules intermixed, and became common to both the local infections; yet the
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the virus of the cow-pox pustule was not contaminated by that of the small-pox.—He adds, ‘ I am convinced from experience, that the matter taken from the cow-pox pustule (in this experiment) would not be more liable to produce eruptive pustules, or a less favourable disease, than matter procured immediately from the cow.’

“ The first and second experiments prove, that the matter taken from the variolous-like pustule on the body, in cases of inoculated cow-pox, and that taken from the cow-pox pustule on the arm of the same person, produce different effects: the former exciting, in fifty-seven cases out of sixty-two, variolous-like pustules; the latter uniformly exciting cow-pox.

“ The third experiment proves, that these diseases will not hybridise; that the virus of the one does not contaminate or change that of the other.

“ The fourth experiment proves, that the cow-pox and small-pox will, in the same person, at the same time, and nearly in the same spot, pass through their different stages, preserving their specific actions and characteristic peculiarities.”

The following cautions, with which we shall conclude our account of this valuable publication, are so judicious that we make no apology for laying them before our readers.

“ The mild form which the cow-pox invariably assumes, has induced many persons who are not medical to inoculate with the vaccine virus, without a previous knowledge of the symptoms which distinguish the genuine disease either from that which is spurious, or from the small-pox.

“ Those who engage in vaccine inoculation ought to be aware that they cannot be too cautious in the choice of the virus, or too attentive to its local action.

“ If the virus be taken without discrimination, the operator will be subject to the errors which many have already committed. If inattentive to the local action, he will be unable

to assert that the constitution is guarded from the subsequent action of the small-pox.

“ Perhaps the benevolent views of those who may be anxious to shield their domestics and the laborious poor from the dire effects of the small-pox, cannot be more effectually promoted than by contrasting the variolous and vaccine pustules at different periods of their progress.

“ The circumscribed circular form, the elevated turgid edges, and depressed surface of the cow-pox pustule, give it a distinct character from that of the small-pox.

“ The small-pox pustule is formed by several small vesicles spreading along the skin, and occupying more space than the pustule of the cow-pox, and bounded by an irregularly angular outline.

“ The vesicles constituting the variolous pustule at length become confluent and full of pus, forming by exsiccation a thin scab. On the contrary, the cow-pox pustule at no period contains variolous-like pus: it gradually hardens, preserves its round edges, and, when perfectly dry, resembles in colour and thickness the stone of the tamarind.

“ The inflammation common to both pustules varies in extent and duration; rarely exceeding an inch and a half in diameter, and generally subsiding about the 13th day from the period of inoculation.

“ Whenever the cow-pox pustule continues gradually increasing till the 11th day, with a surrounding efflorescence, we may safely rely on its preventive power.

“ When a disposition in the pustule to ulcerate appears before the 6th day, the preventive power is doubtful.—This disposition may be destroyed by applying diluted sulphuric acid upon the pustule with a camel’s hair pencil, and after a few seconds washing it off with cold water. If, after the application of the acid, the pustule resumes its form and proceeds through its stages, the preventive power of the cow-pox is no longer doubtful.

“ If on the 3d or 4th day there appears on the part where the virus was inserted, a large pustule, elevated in its centre, with a small vesicle on its apex, and a considerable inflammation round its base, the absence of the preventive action is certain.

“ Whenever the edges of the inoculation pustule are angulated or irregular, or when the pustule appears formed by several small vesicles, it most assuredly has not been excited by the virus of the cow-pox.

“ The constitution generally feels the preventive action on the 8th day from the insertion of the virus. The efflorescence surrounding the pustule, at this period, is a certain indication of its effect on the system.

“ The indisposition is commonly so slight, that were it not expected it would pass unnoticed. In some few instances the patients complain of those symptoms so accurately described by Dr. Jenner.

“ The virus is most active and certain in its effect when taken on the 7th, 8th, or 9th day. If taken and used immediately, on either of these days, and before it dries upon the lancet, it seldom fails to excite the disease.

“ If the virus be received upon glass, and, when perfectly dry, covered with a thin coat of the mucilage of gum arabic, its activity may be preserved for some weeks.”

An elegant coloured engraving, taken from nature, representing the cow-pox and small-pox pustules in their different stages, is prefixed to this publication.

ART. XI. *A Treatise on febrile Diseases, including intermitting, remitting, and continued Fevers; eruptive Fevers; Inflammations; Hæmorrhagies; and the Profluvia. In which an Attempt is made to present at one View whatever, in the present State of Medicine, it is requisite for the Physician to know respecting the Symptoms, Causes, and Cure of those Diseases.*

By

By A. PHILIPS WILSON, M. D. F. R. S. Ed. Fellow of the Royal College of Physicians, Edinburgh, &c. Vol. II. Octavo. 568 pages. CADELL and DAVIES, London. 1800. Price 10s.

OF the first volume of this useful and interesting work we gave an ample account in the Ninth, Tenth, and Eleventh Numbers of our Review. It contained the whole nosological arrangement of fevers, the treatment of intermittents, and a comprehensive view of the doctrine of the late Dr. John Brown, illustrated and improved by judicious remarks of our author.

In the preface to this volume the author answers certain objections to the former part, particularly as to the use he has made of the Brunonian system. "With all the care I was capable of," he says, "I have not succeeded in conveying the same ideas to every reader. It has been stated by one, that I espouse the general principles of the Brunonian system; by another, that I admit no part of it but that which was admitted by all physicians, before Dr. Brown's Elements of Medicine appeared. By one, many of my objections to this system are regarded as invalid; by another, their validity is admitted, and I am censured for allowing it any merit at all. I am said by one to aim at extending the Brunonian system; by another, accused of attempting to bring about a coalition between the systems of Dr. Cullen and Dr. Brown, which, the critic more justly than elegantly observes, is as hopeless a task as endeavouring to milk he-goats. What shall I say in answer to such contradictory objections? I shall only observe of the two last, that I am perfectly unconscious of having made either the one attempt or the other. All I have attempted is to give an accurate view of the Brunonian system, to separate the true from the false parts of it, and to arrange certain facts relating to the laws of excitability without reference to any system whatever. I shall here endeavour in a few

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few words to place the result of what was said of the proximate cause of fever in a clearer point of view.

“ When a state of excessive excitement or atony exists independently of the continued application of some artificial agent, one of two changes must have taken place ; either the quantity or quality of the natural agents, or the state of the living solid, is different from that which prevails in health. If it can be shewn that the state of the living solid remains the same, it follows that the deviation from health is owing to some change in the natural agents ; if it can be proved that the state of these agents remains the same, it then follows that the deviation from health is owing to some change in the state of the living solid. We may go a step farther ; if it can be proved that some of the natural agents remain unchanged, and yet produce effects different from those they produce in health, it not only follows that the state of the living solid is changed, but also that if this change in the state of the living solid will account for the changes observed in the effects of other natural agents, we are not in any degree to attribute such effects to a supposed change in these agents, there being no occasion for any such hypothesis to explain the phenomena. In fever many of the natural agents, caloric, food, light, noise, for example, evidently remain unchanged ; the difference in their effects, therefore, is owing to a change in the state of the living solid. But this change is capable of accounting for the change we observe in the effects of those agents whose condition we cannot with precision ascertain, the circulating and other fluids. It follows, therefore, that whatever change may take place in these during the progress of fever, and however this change may modify the symptoms of fever, too great lentor, acrimony, or other morbid condition of the fluids, is not the proximate cause of fever.

“ With respect to the hypothesis of fever depending on a change in the state of the simple solid. As the natural agents act not on the simple but on the living solid, it is necessary

to suppose a change in the state of the latter; and as this change accounts for the phenomena of fever, there is no occasion for any other supposition.

“ And farther, as all the natural agents excite a morbid action, and as this effect is not confined to any one, but observed equally in every part of the system, what room is there for supposing that any one part is more particularly affected than every other ?

“ Lastly, with regard to fever being a state of accumulated or exhausted excitability, in the sense in which Dr. Brown uses these terms, it is only necessary to refer to the facts, which prove that no such morbid states exist. It is true that the phenomena of synocha are such as we should expect from an accumulation of excitability; but will a surfeit or an excessive quantity of distilled spirits, frequent causes of synocha, occasion an accumulation of excitability ? It appears, then, that in fever the living solid is so changed, that a change is effected in the laws of its excitability; and that, this admitted, there is no occasion for any of the foregoing hypotheses to explain the phenomena essential to fever. Upon the whole, then, the following, as far as it goes, would appear to be a just view of the nature of fever.

“ Every agent acting on the system in general is capable of producing three effects, moderate excitement, excessive excitement, or atony, according to the degree in which it is applied. The first operation of agents constitutes health; the two last, general disease, which has been called fever. If, by the application of artificial or the excessive application of natural agents, either of the two last states be maintained for a sufficient length of time, the living solid is so changed, that is, such a habit is formed, that the natural agents applied in the usual degree produce the same morbid effects till the diseased habit has been counteracted; which, as in the case of other habits, is the more easily effected, the shorter its duration has been. Hence it is that almost any thing making a strong impression

impression will sometimes remove a fever at an early period; and hence the difficulty of removing a fever is generally proportioned to the time it has lasted. The means which cure a fever at an early period, that is, produce a crisis, seem either to expel the offending cause before the morbid habit is effected, as vomiting during a fit of drunkenness; or break the morbid habit before it has gained force, as cold-bathing during the first days of fever. In a more advanced stage, as the morbid habit is corrected with more difficulty, it is corrected more slowly. When in synocha we succeed in changing excessive into moderate excitement, *b. e.* into that excitement which is followed by exhaustion, we have removed the morbid habit, and consequently cured the fever. The cure of synocha, therefore, depends on the abstraction of stimuli. But as atony is the consequence of excessive excitement, if excessive excitement has lasted for a considerable length of time, atony will always be evident previous to the restoration of health. Hence it is, that the symptoms of typhus succeed those of synocha. When we succeed in changing atony into moderate excitement, we have corrected the morbid habit, and consequently cured the fever. The cure of typhus, therefore, depends on the addition of stimuli."

The following observations on the utility of nosologic arrangements are deserving attention; we shall therefore give them in the words of the author.

"I have been indirectly," he says, "accused of having ascribed too much importance to the study of nosology. It is fashionable at present to regard nosology as a very useless branch of medicine. Will the knowledge of a nosological system, it is said, enable you to cure a disease? It certainly will not, but it greatly assists in acquiring the knowledge that will. Let those who slight the labours of the nosologist recollect, that it is his province to point out the symptoms which distinguish one disease from another, and to arrange diseases in such a way as may best shew their affinity, and consequently

quently assist the memory in recollecting their modes of treatment. The anatomist detects the changes induced by internal disease: but of what use would this knowledge prove, did not the nosologist point out the means of ascertaining the presence of such morbid states previous to death? In vain might the chemist and botanist supply us with medicines, did not the nosologist enable us to distinguish the cases in which they are useful.

“ It has been asserted, that the practice of medicine would be improved by attending to symptoms individually, without attempting to ascertain their various combinations, and applying to these combinations particular names. Those who make this assertion maintain (and, if the assertion is true, justly maintain) that nosology is an useless study. Is the assertion true? Does any symptom at all times require the same mode of treatment? Nay, is not the same symptom in one case salutary, in another pernicious? We must therefore be influenced in treating each symptom by an attention to those which accompany it, that is, an attention to the combinations of symptoms is necessary, and consequently nosology of the first importance. By far the greater number of mistakes I have witnessed in practice have originated from the neglect of nosology. It often happens that an opinion, at first maintained on no other account than its singularity, becomes current among those who are unable, or will not be at the trouble, to think for themselves. Many exclaim against nosology, but cannot tell why. The truth is, an accurate knowledge of it is acquired with difficulty, and the indolent are glad of an apology for neglecting it altogether.”

The author has made some alteration in the disposition of the work announced in the preface to the first volume.

“ Contrary to my first intention,” he says, “ the present volume includes all the species of eruptive fevers, and consequently finishes the first part of the work, comprehending idiopathic fevers. The two volumes now published therefore form

form a Treatise on idiopathic Fevers, and may be regarded as independent of those which are to follow.

“ The symptomatic fevers will form the three remaining volumes. In the first of which, that is, the third volume of the work, the inflammations of the skin, head, and neck will be considered; in the fourth, those of the thoracic and abdominal viscera, and of the joints: the last volume will comprehend the hæmorrhagies and profuvia, with a more detailed view of the nosology of febrile diseases.

“ It is my intention, when the present work is finished, to commence another (which will consist of two volumes, and for which the materials are already collected) on the nervous complaints most frequently complicated with febrile diseases.”

The first chapter in this volume treats of the varieties of continued fever. The synochus simplex, not attended with eruption, and the synochus petechialis, have been discussed in the former volume; the synochus miliaris, the synochus aphthosus, the synochus erysipelatosus, and the synochus vesicularis, form the subjects of the present volume.

Synochus miliaris, or miliary fever, is defined by Dr. Cullen :

“ Synochus cum anxietate, frequenti suspirio, sudore olido, et punctationibus cutis. Incerto morbi die, erumpunt papulæ rubræ, exiguæ, discretæ, per totam cutem, præter faciem, crebræ, quarum apices, post unum vel alterum diem, pustulas minimas, albas, brevi manentes, ostendunt.”

The miliary eruption, which gives its name to this fever, rarely appears in the early stage of the disease, and may generally be prevented by a cool regimen. It was much more frequent formerly when the patients were kept in a close room, smothered with bed-clothes, their skin constantly moistened with sweat; particularly it was a more constant attendant on the puerperal state than it is now that a different practice prevails. “ It is when debility prevails,” our author properly

properly observes, “ that the miliary eruption is most apt to shew itself. The robust and sanguine are rarely seized with miliary fever, but in them it is most dangerous. That species of synochus, therefore, in which typhus forms the principal part of the complaint, is most frequently accompanied with this eruption : and in the works of those who treat of the miliary fever as a distinct disease, and consequently endeavour to point out its characteristic symptoms, those are enumerated which have been mentioned as attending this species of synochus.

“ ‘ As this symptomatic affection,’ Dr. Cullen observes, ‘ does not accompany every instance of sweating, it may be proper to inquire what are the circumstances which especially determine this eruption to appear.’—‘ There is only one observation,’ he remarks, ‘ I can offer to the purpose of this inquiry, and it is that of the persons sweating under febrile diseases ; those are especially liable to the miliary eruption who have been previously weakened by large evacuations, particularly of blood.’ Quarin and others make the same observation : thus it is that lying-in women are more frequently attacked by it than others.”

The following observations on the mode of treating miliary fever, or, more properly, fevers attended with miliary eruption, are judicious.

“ As what has been termed miliary fever,” the author says, “ is nothing more than the occurrence of the miliary eruption with the peculiar symptoms that always attend it in continued fever, and as the treatment of continued fever has already been considered, we have only at present to point out how far this treatment is influenced by the appearance of the miliary eruption.

“ When a sweat appears in any continued fever, especially where the debility is considerable, if the symptoms are not relieved by it, we have reason to fear that its continuance, among other bad effects, will induce the miliary eruption, with the anxiety, oppression, &c. that generally attend it.

“ Concerning the propriety of checking such sweats there can be no doubt. A dread of this practice, especially where there is particular reason to expect the miliary eruption, is expressed in the writings of a variety of authors. It seems, however, to have arisen less from cases in which they observed the bad effects of the practice, than from certain opinions respecting the eruption, which, according to these writers, is the means employed by nature to throw out the morbid matter, from which they suppose the fever to arise.

“ The effects of the practice indeed fully warrant the assertion just made. Using proper means to check sweats which do not relieve the symptoms, has never been attended with any bad consequence.

“ The most effectual means of checking sweat is the application of cold, and in many cases it is the best. But the employment of it requires some caution.

“ If the fever be typhus, in which however the increase of temperature is considerable and steady, the application of cold may be free. The same may be said of synocha, if we have no reason to dread a tendency to local inflammation. In the synocha, however, sweats rarely occur without relieving the symptoms. The application of cold requires much caution in the exquisitely formed typhus, where the temperature is little, if at all, above the natural degree. In such cases, attempting to diminish sweating by the application of cold, would often produce an alarming diminution of temperature. Here we must trust chiefly for moderating this sweating, a consequence of debility, to the means of invigorating the system; the best of which in this case are wine, bark, sulphuric acid, and alum.”

Synochus aphthosus, or aphthous fever, is defined by Dr. Cullen,

“ Synochus. Lingua tumidiuscula, linguæ et faucium color purpurascens; ascharæ in faucibus, et ad linguæ margines, primum comparentes, os internum totum demum occupantes,

pantes, albidæ, aliquando discretæ, sæpe coalescentes, abrasæ cito renascentes, et incerto tempore manentes.”

Aphthæ are idiopathic or symptomatic. The former are almost entirely confined to children, and are frequently unattended with fever: when they affect the mouth or fauces only, are few in number and white, there is little danger attending them. On the other hand, when they are very numerous, confluent, and extend down the œsophagus, or larynx, they not unfrequently terminate fatally. Sydenham first notices symptomatic aphthæ, as an attendant on the dysenteric fever which prevailed from the year 1669 to the year 1672. They generally supervened, he says, in those cases in which the fever proved obstinate, and chiefly where the hot regimen had been pursued, and the diarrhœa checked by the use of warm astringents. They are the frequent consequence of great debility, and are preceded by symptoms similar to those that usher in miliary eruptions, to which they are thought by some authors to bear a strict analogy and resemblance. As aphthæ are generally attended, perhaps caused, by a disordered state of the bowels, the cure should be commenced by giving a small dose of ipecacuanha, which may be followed by a mild cathartic. Absorbents should then be administered, creta or magnesia, according to the state of the bowels, supporting the strength of the patient in the meanwhile with appropriate diet, bark, wine, and other cordials; as a gargle, decoction of bark, with tincture of myrrh and honey, is equal perhaps to any preparation that has been devised.

Febris vesicularis, the vesicular fever, or, as it is called, pemphigus, is defined by Dr. Cullen,

“ Typhus contagiosa, primo, secundo, tertio morbi die, in variis partibus vesiculæ avellanæ magnitudine, per plures dies manentes, tandem ichorem tenuem effundentes.”

Dr. Cullen had seen but one case of this disease; but Dr. Dickson, who had seen six, observes, that none of his patients

had received it by contagion, nor communicated it to their attendants.

“ The eruption appears in the form of small pellucid blisters, similar to those produced by burning. They are of different sizes, sometimes as large as walnuts, more frequently about the size of almonds, and often considerably less; surrounded by more or less inflammation. They appear on the face, neck, trunk, arms, and sometimes over the whole body, as in a case given by Dr. Stewart in the Medical Commentaries, in which the vesicles were of the size of a walnut, and the distance of any two of them from half an inch to three or four inches. They sometimes run into each other.

“ The mouth and fauces, where it now and then makes its first appearance, are particularly apt to be attacked with it. This happened in a case related by Dr. Dickson, in which, on the third day of the fever, the patient complained of a smarting itching, and, as she termed it, tingling in her tongue and through the whole inside of her mouth. Her tongue was of a florid red colour, dry, and clean. On the day following there appeared upon it a large pellucid vesicle filled with a faintly yellowish serum, a smaller one of the same kind appearing on the inside of the cheek.

“ In some instances the complaint spreads along the whole alimentary canal. ‘ No person,’ Dr. Dickson remarks, ‘ has noticed an extraordinary peculiarity in this disease, that the vesicles have taken possession of the internal parts of the body, and proceeded in succession from the mouth downward through the whole tract of the alimentary canal, some rising while others decayed.’

“ After the blisters have remained for an uncertain time, from one to several days, they either break, discharging in some cases a yellowish bland, in others a sharp ichorous fluid, or they begin to shrink, and in a short time disappear. And this, perhaps, is the most favourable termination, since when they break they sometimes leave troublesome ulcers.

“ The foregoing process does not proceed on every part of the body at the same time, for the vesicles which first appear soonest subside.

“ Pemphigus resembles the small-pox, in frequently leaving pits in the skin; and in the parts which the vesicle occupied, remaining for a considerable time afterwards of a dark colour.

“ The time during which new vesicles continue to come out is as uncertain as their duration. According to Dr. Cullen's definition, no fresh vesicles appear after the third day; but this, we have seen, by no means applies universally.

“ Swellings and abscesses of the parotid, inguinal, and axillary glands, have frequently accompanied this eruption; and as in other cases of continued fever accompanied by these swellings, the safety of the patient seems often to depend on the matter formed in them being discharged.

“ The vesicular eruption seldom brings relief to the febrile symptoms, but the prognosis in this variety of fever is in some respects influenced by its seat and appearance. When the vesicles are not numerous, and only appear on external parts, they demand little attention; when they are numerous, when they attack the alimentary canal, and are attended with a small hard pulse, the danger is considerable, and is, *cæt. paribus*, proportioned to the degree of these symptoms.

“ When the ulcers left by the vesicles, although external, appear livid, shewing a tendency to gangrene, which seldom happens unless in well-marked typhus, the danger is very great. Even in idiopathic cases of this eruption, where there is no fever of any kind, gangrene sometimes supervenes, and then there is danger; though, in general, Burserius observes, where there is no fever, the vesicular eruption is unattended by danger.

“ We still find the symptomatic eruptions most apt to shew themselves in those fevers in which the typhus prevails. This will appear from the following account, extracted from authors who regard the vesicular fever as an idiopathic complaint.

“ In

“ In the commencement of pemphigus, as in other fevers, the patient droops and is averse to every kind of exertion. The symptoms of the cold stage are generally well marked, attended with headach, sickness, and oppression, the pulse is frequent, seldom strong and full, and delirium is a frequent symptom.

“ It appears from what was said of the definition of the synochus vesicularis, that there is no particular period of the fever at which the eruption shews itself. It now and then appears in other complaints as well as in the synochus. See an account of the cynanche maligna in the *Acta Helvetica*, by Dr. Langhans. There is reason to believe, that in several epidemics which raged in different parts of the continent, the vesicular eruption attended this complaint, but the accounts of them are far from being distinct.

“ It has just been hinted, that the vesicular eruption has appeared as an idiopathic affection unaccompanied by fever. Cases of this kind are related by Dr. Winterbottom, and Mr. Gaitskell, in the fourth volume of the *Memoirs of the Medical Society of London*. Burserius speaks of this eruption without fever as a frequent occurrence.”

We shall pass over the author's disquisition on the cause of pemphigus, little that is satisfactory being advanced on the subject. In the idiopathic disease, as there is rarely danger, scarcely any thing is necessary to be done; small doses of emetic tartar to keep up a moderate diaphoresis may be administered, with a dose or two of some mild cathartic. When it is an attendant on typhus, no alteration from the ordinary treatment seems to be required on account of the eruption.

(To be continued next month.)

ART. XII. *Observations on the Nature, Causes, Prevention, and Cure of Gout and Rheumatism: to which are annexed, Phenomena Physiologiæ issuing in the Cure of these Diseases.* By WILLIAM PETER WHYTE, Stourbridge. Duodecimo.

Duodecimo. 125 pages. RIVINGTONS, London. 1800.

Price 2s. 6d.

GOUT, the author thinks, arises from an undue chemical combination or coalescence of the parts of the fluids, whence they become unfit for circulation, are deposited on some parts fitted to receive them, thus produce distention, excite heat and pain. This combination does not take place while the body is in health. While the stomach and bowels continue to perform their office, and the vessels have their tone or power, the juices are kept in a proper state of fluidity; but when these organs, from imbecility or from being overloaded with too great a quantity of food, or with food that is too rich and luxuriant, are no longer capable of performing their office, then those unnatural concretions take place, and lay the foundation of gout. Rheumatism is occasioned by cold, checking the circulation of the juices in the vessels of the larger joints. The theory of these diseases, the author thinks any person of moderate talents may be competent to understand, but to the cure higher attainments are necessary. "Every mind," he says, "is not competent, nor is every situation in life auspicious to it; for opportunity without mental competence would be ineffectual. It will revert, therefore," he says, "to the more sagacious and indefatigable few, to achieve this intellectual conquest." Our readers will anticipate us in supposing he is one of the happy few, one of the privileged beings, sent to rescue mankind from the dominion of these ferocious diseases. Yes, we learn, he has repeatedly restored persons labouring under those opprobria medicorum to health, after the most eminent of the faculty had tried in vain all the resources of art. The author also, by means of a pneumatic apparatus, cures epilepsy, chlorosis, asthma, dropsy, &c. and inoculates with such success, ease, and safety, that the most beautiful and delicate ladies need not fear the least injury being done to their complexions.

ART.

ART. XIII. *New Inventions and new Directions to the ruptured.*

By a PRIVATE GENTLEMAN. Duodecimo. Low, London.
1800. Price 1s. 6d.

THE author of this little tract was obliged to quit his situation in the army, he says, on account of a rupture with which he has been afflicted more than twenty years. Having tried all the different forms of bandages or trusses then known, all of which failed in keeping the bowels from descending and incommoding him, he at length, after many trials, has contrived a truss, which is put on and worn with more ease, and more effectually prevents the descent of the parts than any thing he had seen. He advises a double pad, one for each groin, although only one side should be ruptured.

The author mentions, as a cause of rupture, swinging dumb-bells, which he thinks should not be admitted in schools. We have no doubt but the inordinate use of dumb-bells, as well as any other violent exercise, as running, leaping, wrestling, &c. may occasion ruptures; but as every kind of exercise, moderately used, has a tendency to strengthen the body, and defend it from such accidents, we see no propriety in prohibiting any of them, because when used to excess they may be prejudicial. The author describes his bandage, and has given a plate to illustrate the mode of wearing it; but not sufficiently clear, we think, to enable persons afflicted with the disease to make it,—which seems to have been his motive for publishing, or at least he professes so much. We think, also, his charge of 1s. 6d. for what might have been comprised in about four pages, with a very indifferent engraving, is double what should have been taken, if that had been his only motive.

MEDICAL CORRESPONDENCE.

(Communications for this department will be gratefully received.)

Art. 14. *On the Causes of Putrefaction in a dead Body, and why the living Body is preserved from it.* By Dr. DOMEIER.

To the Editors of the London Medical Review and Magazine.

GENTLEMEN,

AT first sight it may appear somewhat singular to many readers, that I should undertake to shew in what consists the difference between a dead and a living body. But I beg those who think that I attempt something useless, or already well known, to stop here, and endeavour to answer the question.

Some will pretend to have resolved it by answering, that the living body has a soul, and the dead is without: but this reply must be unsatisfactory to physiologists, because the difference is not perceivable to our senses; and surely no physician will presume to claim the merit, in resuscitation, of recalling the departed soul.

Besides the advantage which the healing art may derive from a physiological truth, this investigation may be of general utility, since we too often perform the last duty towards our departed friends before they are really, though apparently, dead. In different countries of Europe, the most direful examples occur of this kind. The Jews, for instance, are a nation who, by religious laws, hasten the funerals of their friends, and seem little concerned whether or no they are perfectly dead. They have a custom of putting into the coffins some victuals, money, &c.: but, alas! the wretched victims of their ignorance can purchase no air!

With horror I recollect a man at Rome, who is now perhaps perambulating the streets of that metropolis; with what dreadful sensations he described to me his miserable situation, when he was aware that, together with many other bodies,

he was brought into the dead chamber, and afterwards put into a cart full of corpses for interment. (The poorer class of people in Italy are commonly buried without coffins.) The priest, who accompanied the dead cart to the church-yard, thought he perceived some motion in the breast of this apparently dead man, and humanely ordered the body to be examined before it was buried. He was, in consequence, wrapped up in a cloak, brought back to the hospital, and had survived this horrible event six years when I conversed with him on the subject, in the year 1796.

We remark, undoubtedly, in the living body, a constant propensity towards putrefaction. Our mouth smells putrid, when we are negligent in cleaning it; so do our feet, and the whole surface of the skin. This propensity is still more evident in a great number of diseases, where the state of the blood evidently shews that it does not contain its due proportion of oxygen, or, which is the same, that it is nearer putrefaction than when in perfect health. I have repeatedly taken the blood of a perfectly healthy man, and exposed it under the same circumstances with the blood of a diseased man; but the last often became putrid in less than half the time of the first. Still farther, I have observed the blood of patients in a malignant fever, taken a little before their dissolution, yield a putrid smell immediately on its running out of the vein. Such an opportunity is not rare in Italy, because the Italian physicians abuse blood-letting, to the great detriment of their patients, even more than the French. I have known an instance, where a physician at Rome was called in to a patient whom he had not seen before, and, not being able to go immediately, he sent this message, "*Io vengo subito, fatte intanto una sanguinea.*"

Some discases have for their nature and cause only a general or local putridity; *i. e.* a want of oxygen, either in having spent too much, or not having taken in this necessary substance in a sufficient quantity; such are all fevers, from the ephemera

ephemera up to the yellow fever and plague ; the scurvy, cancer, carious bones, some kinds of hæmorrhages, looseness of teeth, one kind of dyspepsia, several diseases of the skin, and rheumatic pains ; even some moral evils, as laziness, or a great propensity to liquors, which are often the consequence of this putrid state of the blood ; and the relief they feel of their unpleasant sensation, from taking antiseptic liquors, may therefore now and then be imitated by a skilful physician.

But, speaking thus of putridity, I should not go further without specifying what degree of this condition I call so ; for want of exactness in this respect has caused different opinions amongst physicians, whether there could exist putridity in the living animal body or not ? and, consequently, whether there existed a disease called putrid fever or not ? I call putrefaction that degree only when it becomes evident to the senses, especially to the nose, often to the eyes ; though it ought to be well noticed, that there may exist in a humid body an approach to putrefaction, which is commonly not called so, as it is only a small beginning, and is scarcely perceivable by our senses. For no one will deny, that as soon as the ox is killed, his flesh begins to putrefy, and, though we do not eat it often till some days after the animal is killed, we do not accustom ourselves to say we eat putrid meat, though there is a real beginning of putrescency. Our cooks are well acquainted with this truth, namely, that meat too fresh, or, in other words, when the putrefaction is not sufficiently advanced, will not be tender ; and they choose rather to kill their fowls a day before they intend serving them for the table.

If it be therefore a fact we observe in the living animal body, a constant propensity to putrefaction, which by various causes is so evidently augmented that it produces all kinds of fevers, from the ephemera up to the plague, scurvy, &c. we conclude rightly, that there must be a sufficient power in our body, which keeps off this putridity in its living state, and which ceases to act in its dead state. This power is exerted by four

great organs constantly employed to separate from our body those particles which come nearer to a state of putridity, or promote it; and some of them take in such particles as powerfully prevent putrefaction, *viz.* oxygen. If any one of these purifying organs does its duty in a lesser degree, and is not sufficiently supplied by the increased action of one of the other organs, our body is exposed to another modification of life usually expressed by the word disease, which we specify afterwards by other denominations, according to the parts whose ordinary functions we perceive interrupted, as rheumatism, gout, colic, &c.

The organ itself which supplies the function of another is, by the increased quantity of the matter it is to separate, often so much irritated, that an indisposition of the supplying organ may originate from thence. If the cutaneous perspiration, for instance, be suppressed in a certain degree, and supplied by the lungs, it causes a cough. If the skin supplies the functions of other organs, it produces eruptions. If the bowels supply the functions of the others, the body is exposed to diarrhoea, colic, &c. Besides, the whole body often suffers from the matter too long detained in it, and then general diseases are brought on.

The four organs to whose constant action we are indebted for the preservation of our bodies from putrefaction upwards of an hundred years, and in a few examples still longer, are, 1. the skin; 2. the lungs; 3. the bowels; and, 4. the kidneys.

The three first act in both ways, to separate and to carry noxious particles out of the body, and take in others very essential for the preservation of our bodies from putrefaction. The kidneys act only in the first way. If their action be imperfect, they produce that modification of life which we call indisposition, as has been explained before; but if their action ceases entirely, that state of our body is produced which we designate under the name of death. No more putrid particles

are then separated by the purifying organs, and sensible putrefaction must now be the natural consequence ; since it is a law, that one putrid particle generates another, and that these two generate four, and that this again goes on in the same geometrical proportion. Putrefaction is, therefore, the only real difference between a living and a dead body, and consequently the only true sign of death. We never ought to consign a body to the grave till we perceive *this only sure sign of real death.*

It is entirely out of our power to determine the moment when the soul quits the body ; we ought, therefore, to choose signs which may ensure us that we do not put our friends into such a dreadful situation as burying them alive. Life hardly ever passes rapidly on to death, but generally by degrees. This may be remarked not only in lingering diseases, but likewise in those changes which we commonly call sudden death. It is a mistaken idea, and not congruous with the animal economy, that death and life are two opposite conditions of our body ; they are only different modifications ; and we cannot therefore determine the moment when life is ceasing, because we do not perceive it. The cessation of breathing and of the pulse leads us commonly to pronounce death as having taken place ; but they cannot demonstrate the termination of life, because we sometimes want both the one and the other in fainting fits. Again, it often happens, that a person who is looked upon as dead has been roused into a temporary state of activity by the bitter lamentations of his friends. The Greek custom of calling with a loud voice three times the name of the deceased, before they buried or burnt the body, was most likely introduced to ascertain whether the person was really dead or not. At Naples, where the common people preserve still the ancient custom of hiring poor women to howl over the supposed dead body, it now and then happens that he is called to life, and lives for hours, or even days. I myself have attended at such ceremonies, and have seen the supposed dead revive.

Life

Life ceases by degrees, and it seems likely, especially in all painful diseases, that death gives a pleasant sensation. Though the cause of pain may remain the same, but can no more have the same effect, we call it the dying state; and it comes, consequently, to the same as if the pain itself was removed, and produces, most likely, that comfortable state which takes place always after the cessation of pain. The beginning of this pleasant state is probably often the reason that many sick people wish so eagerly for death; the approach of it being so agreeable, and hoping that this feeling will still increase. Even in the healthy condition of our bodies, I think, we fear more the state after death than the time in which we imagine death itself arrives.

N^o 41 Conduit Street,

Nov. 17, 1800.

I remain, &c.

W. DOMEIER.

Art. 15. *Copy of a Letter from Dr. MARSHALL to Mr. RING, dated Mahon, Island of Minorca, September 1800.*

MY DEAR SIR,

IN my letter from Gibraltar I informed you of our intention to proceed to this place. We arrived here upon the 7th inst.; and have been busily employed amongst the navy and army, who are both equally anxious to avail themselves of the excellent discovery of our friend Jenner.

The inhabitants here, from the great dread they entertained of the small-pox, were cautious respecting the cow-pox; but were so convinced of its innocency, from our arguments, as to permit us to inoculate some of the infants in the Foundling Hospital. From its mild effects upon them, we have now been solicited to extend the practice to their own children; and, if it becomes general, as it probably will, we shall be detained here a few weeks longer. From hence we intend proceeding to Palermo, Malta, or Naples, as a conveyance may offer;—and I have
to

to beg the favour of you to send me some cow-pock virus to Naples and Palermo.

I am sorry that the great haste in which I am obliged to close my letter prevents the possibility of my adding more, than that the cow-pox in every instance preserves its characteristic mildness.

I remain, &c.

J. H. MARSHALL.

Art. 16. *Copy of a Letter from Dr. MARSHALL to Mr. RING, dated H. M. S. Foudroyant, Gibraltar Bay, October 16th, 1800.*

MY DEAR SIR,

YOU no doubt will be surprised at receiving a letter from me, dated Gibraltar, so speedily after the one I did myself the pleasure of writing to you from Mahon; but as, upon our arrival there, we were too late to join Lord Keith, he having sailed the week previous, I determined to embrace an opportunity that offered of joining him, which I did yesterday.

He has received me with great politeness; and not only permitted, but recommended the inoculating of the fleet for the cow-pox; and I this day commence. I am now, and shall continue, on board this ship, till an opportunity occurs of going up to Palermo or Naples, which, I understand, will be in a very short time.

I am happy to inform you that the cow-pox is in full practice here among the inhabitants, and has preserved all its usual mild characteristics in every instance. It was with great pleasure, as well as surprise, that my former friends received me again; and the feelings they express to our friend Jenner, for the benefit they experience from his great discovery, must be gratifying to all his friends.

Dr.

Dr. Walker I left busy at Minorca; from whence he will proceed up to Malta, and we shall join again at Palermo.

I must beg a frequent supply from you of the virus, as I wish to try as many experiments as I can, upon the activity of it at different ages. I am sorry to inform you, that what I procured from you, and put up so carefully, is now grown inactive; however, that is now four months old.

The troops that are here in the expedition are falling down very fast in the scurvy; and are in general sickly. At Cadiz they have had a dreadful disorder, which, so far as I can make out from the report of the physician who was sent there from Madrid, and which I have seen, has every character of the yellow fever, attended with bilious vomiting, great prostration of strength, feeble pulse, delirium, &c. and is highly infectious. Every precaution is used here to prevent any communication with Spain; though I understand, that since the commencement of the rains its violence has greatly abated.

I remain, &c.

J. H. MARSHALL.

Art. 17. *On Oxygen, considered as a Medicament.* Communicated by M. GRILLE. With Reflections by M. PARMENTIER on that Subject:

FOR some time past, much has been said of the good effects which medicines called *oxygenated* have in the cure of certain disorders, and principally those which affect the organ of the skin: but we ought to have already collected a sufficient number of observations on the efficacy of these kinds of remedies to have nothing to fear from the objections of those who, actuated either by idleness, ignorance, or prejudice, rather wish to keep in their old road than to place themselves in the reach of discoveries which are made daily. We ought, therefore, to hasten to collect all the new facts which

which can contribute to establish the necessary confidence in such remedies as are used. It is by multiplying them, and particularly in comparing them with those already used, that we are enabled to form a rational opinion on any subject which is fit, in all respects, to fix the attention of physicians who interest themselves in the progress of their profession.

With this view, Mr. P. remarks, I hasten to communicate an observation which has been transmitted to me by M. Grille, a physician of the first reputation, who practises at Mâcon.

This officer of health assures me, that the men who work in the mine of manganese that is now open at Mâcon are not subject to the itch, and that those who in that country are attacked by that disorder come thither in search of a remedy, and labour with the workmen. Very soon the itching ceases, the pimples dry up, the skin becomes clear, and in a few days the cure is complete.

One thing very remarkable, according to the observations of M. Grille, is, that the clothes of the workmen, and particularly those which are of linen, in a short time, acquire a most exquisite whiteness. He assures me, he has exposed to the vapour which arises from the interior of the mine, stripes of linen dyed of different colours, and that a few days after, all of them have been sensibly discoloured; which determined him to try if the substance of manganese could not be used itself as a medicament.

With this view he composed a pomatum of six parts of the mineral, reduced to an impalpable powder, and mixed with sixteen parts of hog's lard.

Many persons affected with the itch have been successively rubbed with this preparation, and all have been cured in a much shorter time than by Pringle's ointment. M. Grille, however, observes, that during this treatment he also took care to administer to the diseased the usual internal remedies applied in those cases.

If these reports be correct, it is difficult to avoid thinking with M. Grille, that oxygen in these circumstances acts as a real medicine; and that to its action are to be attributed, in a great degree, the cures he has performed. What appears to give more probability to this opinion, is, that we know the mineral from the mine of manganese, is only the oxyd of that metal, so fully saturated with oxygen, that a certain quantity of the latter separates easily by contact with the air alone.

From this we may suppose, that in the interior of the mine there is always a certain quantity of oxygenated gas in evaporation, which surrounds on all sides the workmen who labour therein, and must necessarily not only act on them, but on the clothes they wear.

As to the effects which M. Grille experienced from his pomatum prepared from the oxyd of manganese and fat, it may be remarked, that it is very analogous to those produced by all other metallic oxyds; and principally those which, being surcharged with oxygen, are susceptible of the loss of a part, to communicate it to any body with which they mix, and which does not possess so much as they.

As to the rest, I think that the explanation which has been given may be of some use, but it is absolutely necessary to repeat M. Grille's experiments. It is proper also to be assured of the nature of the vapour, which, he says, is continually exhaling from the mine of manganese, whether, as he seems to think, it contains oxygen gas in a greater proportion than that which exists usually in atmospheric air.

The experiments necessary to be made to acquire information on that head are so simple and so easy, that there is great reason to be surprised that the idea has not occurred to M. Grille to try them. I would willingly persuade myself that in a short time he will repair this neglect, and will let the world know the result of his experiments.

If he succeed in proving that the mine of which he speaks is always filled with an aëriform fluid, more oxygenated than
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the atmospheric air, and that the excess of oxygen found therein is supplied by the manganese which is dug from it; he has made a discovery so much the more interesting, as it may lead to an explanation of many very important phenomena.

I shall conclude this paper by an observation which M. Laborie, Cadet de Vaux, and myself, have reported, in our inquiries into the best method of preventing inconveniences from the mephitic vapours which arise from necessities during the time they are emptying: it is, that this vapour operates on the nightmen both as a remedy against and preservative from certain disorders; they pretend that the itch is a disorder unknown to them; that they can sleep with a person affected by the itch, without getting it; and that a person with that disorder, who becomes a nightman, is sure in a few days to have the itch disappear: the itching, heat, and small wounds are cured in twenty-four hours; the ring-worm and erysipelas never attack them; they never have chilblains or chopped hands; and lastly, it is observed, they have constantly very soft skins.

[*L'Espr. des Journ.*]

Art. 18. *Observations on the Effects of Phosphorus in a Case of malignant Fever.* By THOMAS MOFFAT, M.D. Communicated to Mr. BLAIR, and by him to the Editors.

SIR,

THE phosphoric pills you furnished me with have been of the most signal service in the case of Mrs. A. at No. 2 Little Drury Lane. She had caught the infection of typhus fever from the family on the floor immediately above, all of whom, four in number, had been attacked in succession.

At the time the phosphorus was administered, about the thirteenth day of the fever, she was in a very hopeless condition; a low delirium had been present several days; the

pulse was exceedingly small and weak, unequal both in frequency and force, and hardly to be felt at the wrist; the tongue was parched and black; the countenance almost cadaverous; the urine and fæces discharged involuntarily. From the beginning there had been constant twitching of the tendons, and other signs of great muscular debility.

During the few days I had attended previous to the period now described, she had taken bark and wine, with opium occasionally. Blisters had been applied, and, in short, the usual routine of medicines employed in such cases had been had recourse to, while she, notwithstanding, continued to sink hourly.

On the evening of the nineteenth a pill was given, containing one grain of phosphorus, and in the course of the following day three more without any apparent effect. She was, however, calmer during the night, and slept more than usual. On the morning of the twenty-first she was evidently better, and so collected as to answer questions. Her pulse was more regular, though still very feeble; she had voided urine, but no fæces, in bed; in the afternoon she took a little food with apparent relish: this day she took four pills, and a like number the two following days, during which she made regular advances towards convalescence. On the twenty-fourth the febrile symptoms were so far overcome, as to render a further continuance unnecessary; and accordingly a bitter stomachic mixture was substituted in place of the phosphorus, of which she had taken altogether twelve grains.

I much regret that little information could be obtained respecting the sensible effects of the remedy employed, the principal attendant, both on husband and wife, being a young boy: one circumstance, however, was too obvious to escape his observation, which was a frequent return, three, four, or five times a day, of an universal glow of heat soon succeeded by copious perspiration. This was the more remarkable, as, before the exhibition of phosphorus, and during the intervals between

between these flushes, the extremities were so cold as to require a constant application of artificial warmth: the glow did not immediately succeed each dose of the medicine, but occurred at irregular and uncertain periods. She never complained of heat or other uneasy sensations in the stomach, nor of uncommon thirst. As the urine was passed involuntarily, nothing can be said about the diuretic effects of the remedy: she required frequent laxatives or clysters while using it.

I am, Sir, yours most sincerely,

London, 6th Nov. 1800.

THOMAS MOFFAT.

Art. 19. *Information respecting the Case of Mrs. Craib, supposed to have been cured of two cancerous Breasts; with an Instance of a dangerous chronic Disease cured by supervening Fever.* Communicated by Mr. OLIPHANT, Member of the Royal College of Surgeons in London.

To the Editors of the London Medical Review and Magazine.

GENTLEMEN,

AS pathological facts, I wish to give the following cases for the consideration of the faculty. Though they have no great similitude, they cannot be considered as unimportant, when we are to treat of the curative influence of supervening diseased affections, and as affording to the practitioner a consideration how such secondary diseases may be conducted for the attainment of the best possible state of health.

In the Nineteenth Number of the London Medical Review and Magazine, p. 315, an account is given by Dr. Nisbet "of the Cure of a Cancer of both Breasts, one ulcerated, the other scirrhus." In a recent communication to you, I said it was my wish to have that statement considered as entirely his own, and promised to transmit my opinion thereon: I now beg leave to fulfil my engagement.

Mrs. Craib, of Tottenham Court Road, aged 46, has had three children, the last fifteen years ago, and was never able to suckle with the left breast; but had no great inconvenience from this circumstance. The general health was hitherto regular, till a pleurisy seized her; otherwise she was extremely hearty, and constantly employed in an active life.

Two years ago she got a violent bruise on the upper part of her left breast; the effects subsided as well as they usually do in common cases of contusion, only here was left some hardness with a little occasional pain.

Six months after, she received another bruise on the same part; and all the consequences of contusion, swelling, livor, pain, were greater than in the former accident. The remaining pain was more severe, and the hardness of greater extent. In the recent state, repeated applications of leeches were ordered by a competent surgeon; and when the active condition of the disease was supposed to be removed, some saponaceous camphorated embrocation, and occasional bleeding with leeches, were had recourse to.

At this time the hardness was detached, and moveable from the general glandular structure of the breast; when she went under the care of a friend, not of the profession, but who was a close reader of medical books. He had selected from thence some active applications, but, of course, applied them at random. The intention was to procure suppuration in the indurated part after the trials for discussion had failed; and one of the applications was a poultice of pigeon's dung, that produced excessive burning and most excruciating pain; which, however, I believe, totally changed the diseased condition, but increased its extent. It now reached over much more of the breast, and converted the whole into a solid mass of disease, attended with an irritation to the axilla and to the other breast, wherein an enlargement arose.

The next person under whose care Mrs. Craib fell, was a man who kept a chandler's shop in our neighbourhood, who had

had been a porter to a surgeon. He had boldness to pronounce his new patient curable in six weeks, and that he would set about it. He began his course by sprinkling it with a white powder, supposed to be burnt alum, which excited much pain, and covered the whole with a favourite ointment that he always carried away with him. This would not do; but he said it was only preparatory for the knife, which was not submitted to.

Mrs. Craib now got a recommendation to an eminent and experienced surgeon, who directly saw the features of bad treatment in her breast; and expressed astonishment, after hearing her case, that she had not proper assistance; and offered his services of recommendation to a public institution, which, however, she declined accepting.

She was depressed with the prospect before her, being tormented with shooting, throbbing pains, particularly at the upper part of the breast, attended with an oozing, irritating sanies, that excoiated as it extended. There was an ulceration below the nipple about the size of a shilling, and one about half the size above, both with jagged edges, covered at the bottom with a tomentous slough of a yellowish colour. In the ulceration the cellular membrane first gave way, and a little diseased skin projected, but was level in the sore circumference.

In addition to the above appearances, altered only in degree, when she first applied to me, the whole breast was a darkened, consolidated, tense mass, firmly fixed to the chest, and there was a swelling in the armpit the size of a pullet's egg: from the irritations the breast had undergone there were produced several inflammations of the cuticular glands around, particularly between the breasts, most in the upper part. There was an adventitious hardness in the other, which she said arose from the painful applications to the ulcerated one: I dare say it would have weighed three fourths of a pound.

In some places there were interstitial suppurations in the
upper

upper part of the breast; a round hole, with matter on the surface, that could not be wiped away, as happens in habits resembling such as labour under sea scurvy, who have ulcers particularly in the legs: there are often such ulcerations of skin at different distances.

Her hands were affected with slight rhagades, and her left arm was considerably swelled; her pulse was quick, but, I believe, not too frequent; her health constitutionally very little impaired, and perfectly regular. She slept without any anodyne; and, in short, had nothing to complain of except the ulcerated breast, and swelling under the arm and the hand.

She put herself under my care the 8th of June last. I applied a sedative anodyne solution to the ulcerations, and covered the whole breast with soap cerate plaster; I ordered a little of the *magnesia vitriolata* to be taken occasionally, to drink four ounces of the *aqua mephitica alkalina* three times a day, to bleed the most tense part of the breast occasionally with leeches, and to live on milk diet.

This plan had a prompt effect in removing the irritation from the want of appropriate applications; but, on the subsidence of tumefaction, there was a great secretion and sloughing, emitting an offensive stench. I changed the dressing for the fermenting poultice, which excited trifling pimples under the breast; but it was continued to the 18th, when the sores and disease were as easy as they could be expected to be: the tenderness and swelling in the axilla were more lessened: from not being able to bring her arm to her side for some time past, she now lay on this side, and could nearly do both; the chopping and dryness of her hands were much lessened; she was able to attend her shop, and slept well. It was a favourable circumstance that no bleeding attended this ulceration; as the whole breast appeared enveloped in such disease, that I should have had little assistance from the power of contraction in the vessels, if it had occurred.

Having

Having received a circular letter, in common with others of the faculty in this metropolis, from Dr. Nisbet, signifying he intended to confine his practice to the treatment of cancer, scrofula, and phthisis, I proposed calling him in; and on the 18th he prescribed a grain of opium every night, an alkaliescent sulphurated drink and medicine, and to dress with simple cerate. He said it was a hopeless case, and that nothing could be done but palliation.

However, he gave her an antimonial alterative pill of his own preparation, which I admitted of, wishing to waive delicacy for the possible benefit of my patient. But she only lost strength: hopes of suppuration in the principal part of the disease were entertained, which did not happen. A similar ointment was also rubbed in, only substituting cinnabar for antimony.

She soon now was obliged to keep to her bed-room, and spent most of her time, from the middle of July, in bed; indeed the labour of her shop lessened the chance of benefit from any treatment.

On the 18th of July, in the evening, she was taken with a severe rigor, and for this she had a sudorific dose given. She had three such attacks in twenty days, and they were followed by no evident alteration, except sloughing of the ulcer, which exhaled such a foetor, that Mr. Craib (her husband) was obliged to part beds.

My patient was so much reduced and debilitated, that I now repented I had not cast my attention to Mrs. Osborn's case, particularly, as we had gained no advantage whatever in the appearance of the breast or sores: the last were greatly enlarged, and the breast had lessened in equal proportion only to the waste in the body generally; and it was agreed that country air was now the only resource.

When I beheld my patient's health and strength much reduced by our treatment, I was mortified to meet with this remark in Amatus Lusitanus: "Novi enim nonnullas mulieres

cancros in mamillis habentes solo bono vitæ ordine, absque ullo medicamentorum topicorum irritamento perlongum vivere tempus, ita incolumiter prospere et sane, ac si nullum patiuntur morbum;" for this was the best possible case to do nothing active.

On the 16th of August, in the evening, she got out of bed to have it put to rights; thinking she would directly return to it, she did not put on her stays, and in this state remained up longer than she intended. For want of her stays, however, as she thought afterwards, a pain seized her under the right breast. Conceiving it might be caused by flatulency, she took some glasses of Madeira wine; but the pain increased, and obliged her to send for me at five o'clock in the morning, when her pulse could hardly be felt. She was obliged to sit up in bed, was continually crying out with pain, at the same time pressing forcibly on the side for ease.

I bled her to nine or ten ounces, and applied aqua ammoniæ puræ with a little oil, to excite a sudden irritation on the side, and to save strength by rendering less bleeding necessary; I also gave an opiate relaxant medicine immediately upon it: however, a fit of coughing came on, and pain recurring, I was under the necessity of repeating it to nearly the same quantity; and both times the blood was highly buffed and cupped. She pursued the opiate relaxant plan; in the evening expectoration came pretty freely on, and all symptoms of pleurisy lessened.

She was not, for some days, troubled to shew her breast; however, attention to cleanliness and dressing were not omitted; and when it was next examined particularly, the sloughing ulcer was changed into a common sore, and the breast greatly reduced in size, and was soon totally absorbed, as well as the swelling in the axilla; though only a reduction of the size of the hardness in the right breast was obtained by this process of nature, the vis medicatrix naturæ, if it may be so called, leaving a pulmonic disease of serious consideration.

tion behind it, which was and is evidently influenced by the previous diseased affection.

Ever since the pleuritic attack her breath has been unusually short, checked with cough and glairy expectoration. The pulse, which before, I believe, was not 90 in a minute, became now 130, creeping and indistinct. She appeared exsanguinated and extremely feeble. An issue was made in the arm without any marked advantage.

On the 2d of October an increase of short breath and teasing cough came on; for this I gave her the tincture of fox-glove, with small doses of volatile alkali and ipecacuanha, and camphorated tincture of opium, which moderated it and caused expectoration; but during her increasing expectoration, she was afraid the medicine was mercurial, and therefore did not take it properly.

The relation of this case having extended already to an unexpected length, I must be succinct in the farther consideration of it; and shall mention only, that since the beginning of the last month, she has had anasarca, with an almost imperceptible pulse; violent cough and short breath; spitting a great quantity of glairy mucus, afterwards purulent; and an inability to lie down: at one time her urine was not more than four ounces in twenty-four hours; sometimes was secreted the *urina jumentosa*. By passing a seton on the chest, under the right breast, giving the powder of digitalis, ipecacuanha with an opiate, and opening her bowels with cream of tartar, and at times the infusion of cascarrilla with parsley-seed, and at other times infusion of quassia with caraway seeds. Her health, from this plan, is much improved; her pulse is reduced to 110, her breath better, but the expectoration is purulent, the secretion of urine copious, her appetite good, and no deficiency in the process of digestion.

However, subsisting still is a scirrhus in the right breast, which seems to enlarge with her repletion; and there is not the least doubt of morbid irritation existing in her habit, most

likely the offspring of her absorbed diseased breasts, or that disposition which produces scirrhus.

Her breath became much easier, and expectoration freer, on the 13th inst. by the irritation being transferred to the forehead, producing there erysipelas, great swelling, pain, and blindness; which I am resolved to let have its natural course, and to mark its operation on this Proteus-like diseased affection.

When Mrs. Craib first applied to me, I administered the comfort of a good chance of cure by the process of sloughing and wasting; having had an example in the case of Mrs. Osborn, now aged 57, wife of Mr. Osborn, breeches-maker, South Street, Manchester Square, who, nineteen years ago, received a push on her right breast, and soon after a violent pressure from an iron rail. Considerable pain was felt from the last accident, and a hardness left, with tenderness to the touch.

In some short time there arose a puckering of the skin all around the hardness: afterwards the furrows became excessive; all concentric to the induration, and compared by her to binding strings.

Inflammation supervened; all the breast seemed comprised in it; suppuration ensued, and separated the induration from its surrounding attachment to the breast. This process was accompanied with a cold shivering, sickness, and vomiting.

When the separation was complete, the indurated portion came out like a cork, as she terms it, leaving a gaping hole resembling the mouth half opened. After the expulsion of the induration, the puckering skin unfolded to pass into the cavity; it crept in, becoming inverted. The ulcerated surface was very little sensible, but the whole breast very tender. From the cavity excessive hæmorrhages ensued, happening particularly at night, so as to deluge the bed-clothes, and reduce her to extreme weakness.

During the ulcerative process, a cupful of cliver-juice was
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drank

drank every morning, when it could be had ; and malt infusion in the different stages of fermentation, with barm, to her victuals.

The glands in the axilla were greatly enlarged during the process of induration and separation ; and the band of communicating lymphatics between it and the breast was greatly increased ; the arm was swelled, of a cumbrous weight, and rendered almost entirely useless.

Seven years ago I saw her ; the communicating lymphatics between the axilla and breast were alone in a condition of ulcer ; the breast was entirely absorbed and gone ; but the axillary swelling continued considerable.

She had for some time used an ointment of oil, wax, and rosin, which appears to be the general one among the cancer-curing people in London ; and this I wished her to employ as well as to continue her plan.

The swelling of the arm, and in the axilla, gradually lessened and disappeared ; the sore by degrees healed, and has been well for these five years past : she now possesses a perfect use of the arm.

There was reason to think, that the great change which took place in this case might have been owing to supervening fever occurring two or three times in the autumns, attended with cholera morbus to a dangerous degree ; her breast was at its worst state at these times ; and since its cure, she has remained free from such attacks.

Miss S....., of Grafton Street, Soho, now aged about 30, to whom I gave advice seven years ago, being of a cachectic habit, had erysipelas extending from the shoulder of one arm to her head, accompanied with great depression of strength. By the exhibition of the bark, and the application of alcohol, her arm soon got well. The general health continued the same ; the menstrua were not secreted in the healthy quantity or quality ; her legs were swelled, and her breath short, with some other symptoms attendant on chlorosis.

From

From an active situation she changed to a more sedentary one, which was followed for a year. During this time all the chlorotic affections were increased; she had shortness of breath, was more swelled, with stiff and lumpy legs, and general leucophlegmatia.

She took large doses of the ferrum vitriolatum with an aromatic, occasionally stimulating aperients and diuretics, joined with the advantage of a country situation for some weeks. During this course of treatment, and occasional change of air, she received temporary relief, but never experienced any thing like a good state of health, nor any alteration in her appearance.

It was decided that she should visit her native country, Yorkshire; there to have all the advantages of a country life. She there derived some benefit; but after a twelvemonth's residence, a perfect reinstatement of her health was far from being accomplished.

Returning to London, the same sedentary employment was followed, though not equal in degree: now, however, gradually came on all the former chlorotic affections, and nearly to the extreme, accompanied with extraordinary languor, and great indisposition to move.

October 21, 1798, she was seized with a typhus fever, which confined her fourteen days to her bed. It was conducted in the ordinary mode, and she got up in the most reduced weak condition. Afterwards, in the convalescency, nothing was done as to medicine; attention to diet and domestic management were particularly pointed out; and in a regular time she attained strength, and grew a changed creature, as to her constitutional state, reduced in size, cheerful, with all the accompaniments of perfect health, and remains now in the full enjoyment of them.

I have wished to confine myself to a mere statement of facts in the preceding cases; but with respect to the changes which took place in Mrs. Craib's breast, I was and still am of a
decided

decided opinion, as far as a practical point can be determined, that the absorption was attributable to sudden inanition, and the change in the state of her ulcer to supervening general inflammation. How far a similar action was curative in the other cases, I leave to the judgment of professional gentlemen to consider.

If my avocations permit, I will draw up cases of scirrhus in the breast, and their mode of cure; with a pretended case of scirrhus destroyed with caustic, by an empiric, who induced a worse disease; and a cure of an ulcerated breast of twelve months standing, mistaken for cancer, and treated in a mode little known, at least practised, in the profession.

I am, Gentlemen,

Percy Street,

November 18, 1800.

Your humble servant,

ISAAC OLIPHANT.

Art. 20. *Monthly Catalogue of new British Publications.*

1. **P**RACTICAL Observations on the Use of Oxygen or vital Air. Part I. Illustrated with five Plates. Containing various Cases of Palsy, nervous Debility, Epilepsy, Hydrocephalus, Scrofula, white Swellings, and Distortions of the Spine; with some Experiments on Plants. By D. HILL, Surgeon. Quarto. Rivingtons, London. 1800. Price 7s. 6d.

2. An Appendix to the Treatises on the Cow-pox; being a Continuation of Facts and Observations relating to that Disease. By EDWARD JENNER, M. D. Quarto. Low, London. 1800. Price 2s. 6d.

3. The naval Guardian. By CHARLES FLETCHER, M. D. Octavo, 2 vols. Chapman, London. 1800. Price 14s.

4. The Plague not contagious; or, a Dissertation on the Source of epidemic and pestilential Diseases: in which is attempted to prove, by a numerous Induction of Facts, that they

they never arise from Contagion, but are always produced by certain States, or certain Vicissitudes of the Atmosphere, &c.

By CHARLES MACLEAN, M. D. Member of the Corporation of Surgeons of London; and, for several Years, a Practitioner of Medicine in the East Indies. The Second Edition, with Additions. Octavo. 49 pages. Murray and Highley, London. 1800. Price 2s.

5. Some Account of St. Bartholomew's Hospital, London. West and Hughes, London. Duodecimo. 22 pages. Price 6d.

6. Observations on the Nature, Causes, Prevention, and Cure of Gout and Rheumatism: to which are annexed, Phænomena Physiologiæ issuing in the Cure of these Diseases. By WILLIAM PETER WHYTE, Stourbridge. Duodecimo. 125 pages. Rivingtons, London. 1800. Price 2s. 6d.

7. New Inventions and new Directions to the ruptured. By a PRIVATE GENTLEMAN. Duodecimo. Low, London. 1800. Price 1s. 6d.

Art. 21. *Answers to Readers and Correspondents.*

1. **W**E are obliged to AMICUS for the salutary hints contained in his letter of the 9th instant, and hope to profit by them.

2. CHIRURGICUS PROVINCIALIS will find, by our future Numbers, that his remarks concerning foreign publications are not overlooked. On some occasions, we acknowledge, a greater degree of respect has been paid to the productions of Germany, &c. than their intrinsic merits entitled them to.

3. We inform a CONSTANT READER that it is our endeavour to notice every British medical publication (periodical works excepted) as early as our arrangements permit; but circumstances will now and then unavoidably occur to interrupt the order of our proceedings, and occasion temporary delays.

THE
LONDON MEDICAL REVIEW
AND
MAGAZINE.

VOL. V. N^o XXIII. JANUARY MDCCCI.

ANALYSIS OF BOOKS.

ART. I. *Elements of the natural History and chymical Analysis of mineral Substances, for the Use of the Central Schools.* Translated from the French of MATHURIN JAMES BRISSON, Member of the National Institute of Arts and Sciences, and Professor of Natural Philosophy and Chymistry in the Central School at Paris. Octavo. 147 pages. WALKER, London. 1800. Price 4s.

THIS little volume contains a scientific arrangement and description of mineral substances, drawn up for the benefit of the pupils who attended the author's lectures or demonstrations on the subject. An elementary work of this kind does not admit of analysis; its merit will consist in the accuracy with which the author has defined and described the several objects treated of, and in the care he has taken to avoid

omitting any that ought to be noticed. With the view of ascertaining these points, we have examined the work with attention, but see little to censure; some omissions there seem to be, but they are of substances not well described or known, and therefore, perhaps, purposely passed over. The author begins with describing the more simple earthy or stony substances; then the result of their combination or mixture with different acids, these forming the larger family of stones, called saline stones, or earthy salts; then the combination of the simple or primitive earths with one another; these form stones, properly so called; then volcanic productions; and, lastly, metals. We shall exhibit specimens from each of these parts, which will convey to our readers a more just idea than we could otherwise give of the execution of the work, and of the merit or defects of the translation.

“ *Lithology.*

“ The object of lithology is to study the earths and stones. These are dry, inodorous, tasteless substances, very little or not at all soluble in water: their specific gravity is never more than four times and a half that of water; the greater part of them is far from attaining this weight.

“ By analysing earths and stones, and separating the substances mixed with them, chymists have obtained some principles, which may be considered as terreous elements, or primitive earths.

“ These principles are five in number: 1. Lime; 2. Magnesia; 3. Baryte; 4. Alumine; 5. Silice.

“ The earths and stones appear to be all formed from these principles. We must, therefore, begin with determining the nature of these primitive earths.

“ *Of Lime.*

“ Lime is seldom found pure. It is contained in chalk, which is a neutral salt, formed by the combination of lime with the carbonic acid. The following process is the most proper for obtaining lime in its greatest purity.

“ Chalk is to be washed in boiling distilled water, afterwards dissolved in distilled acetous acid, and precipitated by the carbonate of ammonia. The acetous acid combining with the lime expels the carbonic acid, which escapes in the form of gas; then the acetous acid leaves the lime, to combine with the ammonia, and the lime is precipitated. This precipitate being washed and calcined, the residuum is pure lime.

“ Lime is soluble in water, but in very small quantity: more than six hundred parts of water are necessary to dissolve one of lime. It turns the blue vegetable colours green.

“ Lime has a pungent, acrid, burning taste.

“ It absorbs water with avidity, and in it disunites, swells, and increases in volume, exciting a considerable degree of heat.

“ Lime dissolves in acids without effervescence, but exciting heat.

“ Lime, when alone, is infusible, even by a fire blown with oxygen gas, according to Lavoisier's experiments. But when combined with acids it forms a fusible body; for lime is a base capable of being combined with salts, and even of all such bases is that which is most copiously spread all over the globe.

“ Treated with the borate of soda, and the phosphates of urine, lime is dissolved by them without effervescence.”

The combination of these primary earthy or stony substances, we have before said, forms saline stones, or earthy salts.

This order of substances, the author says, “ comprehends all those stones in which the primitive earths are combined with the several acids, and for this reason are described by the name of earthy salts, or saline stones. The primitive earths being five in number, this order is composed of five genera of stones, each distinguished by the peculiar earth which forms its basis.

“ GENUS I.—*Saline Stones with calcareous Basis.*

“ This genus is composed of such stones as have lime for their basis. The different species comprised under this genus are distinguished by the different acids in combination with this basis.

“ SPECIES I.—*Combination of Lime with carbonic Acid.*

“ The results of this combination are the carbonates of lime, or calcareous stones. This combination is the most frequent; and the principal characters of these stones are, 1st, to effervesce with acids, which expel from them the carbonic acid; 2dly, to be converted into lime by calcination, because heat also expels from them the carbonic acid.

“ Some of the calcareous stones crystallize regularly; most commonly in rhomboids, as for instance, the calcareous spars; and some others in pyramids or prisms. Their specific gravity is commonly little above 27000. Chymical analysis has shewn, that in a hundred parts of these stones there are from thirty-four to thirty-six parts of carbonic acid, from fifty-three to fifty-six parts of lime, and the remaining parts are water.

“ Other calcareous stones crystallize confusedly, for instance, the alabaster and the stalactites. The specific gravity of the former is from 27000 to 28000, and the specific gravity of the latter is only from 23200 to 24700.

“ Others are found in shapeless masses; some of which are capable of receiving a bright polish, as the marbles; and some have a rough and coarse texture, as freestone and chalk. The specific gravity of the marbles is from 26500 to 28500; that of the freestone, from 16000 to 24000. Whenever calcareous stones are possessed of a degree of transparency, they occasion a double refraction of light.

“ N. B. What occasions the superior hardness of many ancient buildings is the conversion of the lime contained in the cement into chalk, by the absorption of the carbonic acid of the air.

“ SPECIES

“ SPECIES II.—*Combination of Lime with the sulphuric Acid.*

“ The results of this combination are, the gypsums, selénites, plaster stones. These stones either effervesce with acids, or give fire with steel. The coarse and opaque gypsum, called plaster stone, has a specific gravity of 21679. The other gypsums from 22000 to 23000. These stones crystallize chiefly in tetraedrous, rhomboidal, flattened prisms.

“ These stones, when calcined and pulverised, if kneaded with water, form a paste, which receives every impression, and hardens when dry. It is commonly used for ornamental works in the interior parts of buildings.

“ One only of these stones is permeable to water, viz. the plaster stone. They all occasion a double refraction of light.”

Order the Second contains stones, properly so called.

“ The simple and pure primitive earths are seldom found separate on the face of the globe. Commonly they are found mixed with one another, and form masses of different volumes, and different hardness, according to the nature of the earths which are mixed together, and of the extraneous matters which are combined with them. These mixtures are stones properly so called.

“ In these mixtures generally one earth predominates over the others, either by its greater quantity or by imparting its character to the mixture. This circumstance determines the genera, which are five, according to the number of the primitive earths. The species are distinguished by the different principles which constitute them; and the different proportions of these form varieties.

“ *Alumine, Silice (Silex), Carbonate of Lime, and Lime.*

“ This mixture forms the clays. Their character is that of adhering to the tongue. They dry, harden, and contract in the fire; in water they moulder, and form a paste, which may be handled and shaped at will. Iron is their most common colouring principle, and their colour varies according to the different states in which this metal exists in them.

“ Clays

“ Clays are the basis of earthenware. We have three sorts of it in France, called *poterie*, *fayance*, and *porcelaine*.

“ *Poterie*, or coarse earthenware, is made of clay mixed with sand, in order to render it more porous, and more able to support the action of fire. To render it impermeable to water, it is glazed. This glaze is prepared from the sulphurous lead ore, or from the yellow copper ore, powdered and diluted in water. The earthen vessel, after being baked, is dipped in the glaze, the water is absorbed by the dry vessel, and its surface remains covered with the powdered ore. The vessel is then put into a furnace, where the ore becomes vitrified, and this metallic glass is what is commonly called glaze.

“ Glazes of this sort are dangerous, because they are soluble by fat substances, oils, acids, &c. ; accordingly it would be very beneficial to substitute others in their places, and Chaptal has proposed the two following methods of glazing :

“ The first method consists in diluting in water *argile de Murviel*, and dipping into it the vessels which are thus exposed to dry. When dry, they are dipped anew in water in which green glass finely levigated has been diffused ; and are then put into a furnace, where the stratum of glass powder applied to their surface and the *argile de Murviel* melt together and form a very smooth and white glaze.

“ The second method consists in dipping the earthen vessels into a strong solution of marine salt, and afterwards baking them.

“ *Fayance*, or *delft-ware*, differs from the preceding, by the degree of fineness of the clay employed in it, and by the nature of its glaze. This consists of a sort of glass rendered opaque by the oxyde of tin, commonly called enamel. To compose it, a hundred parts of lead, thirty of tin, ten of marine salt, and twelve of purified potash, are calcined together ; and this mixture, calcined and melted, is what forms the shining enamel of the *fayance*.

“ *Porcelaine*, or *china* as it is commonly called, is the finest
of

of all earthenwares. It is white, semi-transparent, and of a very fine close grain. Porcelaine was first manufactured in Japan and China. It is composed of two very different substances, the one argillaceous, the other vitrescible: the Chinese call the first kaolin, the second pe-tun-sè. These two substances are found abundantly in France. The argillaceous substance retains in France its name of kaolin, and is very common in the neighbourhood of Alençon, at St. Yrieix, eight leagues from Limoges, and in several other places. The vitrescible substance (the pe-tun-sè of the Chinese) is the felspar (spath étincelant) very common in the Cevennes, and in many other places. Some assert, that in the neighbourhood of St. Yrieix, an earth is found composed of both these substances, and consequently fit by itself alone to make porcelaine.

“ Clays are also used by fullers to deprive clothes of greasy substances; and pipes are made from a white clay, which retains its colour in the fire, and is capable of supporting a violent degree of heat.

“ GENUS V.—*Siliceous Mixtures.*

“ All the stones of this genus give fire with steel.

“ SPECIES I.—*Silice* (Silex), *Alumine*, *Lime*, and *Iron*, *intimately combined.*

“ The mixture of these different substances forms all the gems and precious stones, of which there is a great variety, distinguished from one another by their different gravity, hardness, colour, brightness, the proportions of the constituent principles, and their more or less intimate combination.

“ *Red Gems.*

“ These are, the ruby, the vermeille, and the garnet. Rubies are transparent stones of a more or less intense red colour. They are of four different sorts, the oriental ruby, the spinell ruby, the balass ruby, the Brazilian ruby.

“ The oriental ruby is of a cochineal or purplish red, sometimes verging to violet; its hardness is almost equal to that
of

of the oriental sapphire, and approaches very near to that of the diamond. It seems unalterable; and exposed to a violent fire does not melt, retains its colour, its brightness, and its whole weight. It is found crystallized in elongated hexagonal pyramids, joined base to base; the faces of the pyramids are isosceles triangles. Its specific gravity is 42833. It occasions a single refraction of light. According to Bergmann, one hundred parts of this ruby contain thirty-nine of silice, forty of alumine, nine of lime, and ten of iron.

“ *Diamonds.*

“ The diamond is unquestionably to be placed among the gems, but it differs so widely from those of which we have been speaking, as to deserve a particular article. Its combustibility is a property which peculiarly belongs to it. The diamond burns in the same manner as phosphorus does, and disappears without leaving any residuum; but for this effect it requires the presence of air, in the same manner as it is required in the combustion of any other inflammable substance. A cupel fire is sufficient to produce this phenomenon.

“ The diamond is the hardest of all bodies, and can only be wrought by itself, diamond powder being the only substance that can cut the diamond.

“ The diamond has a great transparency. It is the finest and brightest of stones. All diamonds occasion but a single refraction of the rays of light, but this refraction is stronger than in any other substance; they separate colours more, and for this reason they shine so eminently, particularly in the sunshine, or even by candle-light. We know two sorts of diamonds, the oriental diamond, the Brazilian diamond.

“ SPECIES VII.—*Silice (Silex), Alumine, and Iron.*

“ This mixture forms the jaspers. They possess a great hardness, and assume a high and durable polish. Exposed to the action of fire they are infusible, and, according to Wedgwood, acquire a greater hardness. Their fracture has
seldom

seldom any lustre. They are of a great variety of colours, some green, red, brown, yellow, purple, gray, blackish, of different gradations, and even variegated, spotted, veined, or striped; these last sometimes of alternating zones of two colours, and then called jasponyxes. Those which go by the name of flowered jaspers are spotted and variegated of different colours. The sanguine jasper is of a fine deep green, with spots of fine red, and that in which the red is paler goes by the name of heliotropium. Their specific gravity is from 23587 to 28160."

We shall conclude with a passage or two from the last part, which describes the properties of metals.

Metallurgy.

"The object of metallurgy is to know metallic substances. These are the heaviest bodies in nature, which have the property of melting and acquiring lustre by the action of fire, and after that, in cooling, become hard, and convex on their upper surface.

"Nature seldom offers us these substances in a state of purity. If we except gold, and sometimes silver, they are naturally combined with several other substances, which in part conceal and alter their metallic properties. Nature has left to the industry of man the care of extricating and purifying them.

"Metals in this manner concealed, disguised, and hidden under ground, form what are called ores. These exist commonly in the fissures and cracks of rocks, and are called by the name of veins (filons), following different directions, sometimes continuous, sometimes interrupted and broken. In the first instance they are called in French filons suivis, in the second filons deserteurs. The mines where the metallic ores appear in separate masses are called mines en rognons.

"The science which treats of the methods of separating metals from their ores is named Docimastics.

"Of the metallic substances, some are malleable and ductile,

tile, that is to say, they have the property of extending themselves under the hammer; others are very little malleable, if at all. The first of these are called metals, the second semi-metals; and we shall therefore divide them into two orders.

“ ORDER I.—*Metals*.

“ The knowledge of metals is of the greatest importance to mankind; their use in trade is so frequent, and in the arts so various, that few objects can be more interesting than the science which treats of their nature.

“ Metals are seven in number: gold, silver, platina, copper, iron, tin, and lead.

“ Some of these resist the most violent and protracted action of fire, without undergoing any change in their weight, or any other sensible alteration. These are called perfect metals. Others resist the action of fire only to a certain degree, after which they alter, combine with oxygen, and are changed into a sort of earthy substance, called metallic oxyd. These last are named imperfect metals. We shall therefore divide metals into two genera.

“ GENUS I.—*Perfect Metals*.

“ We call perfect metals those which are in an eminent degree susceptible of being extended, stretched, flattened, without tearing or breaking, when under the hammer, the flatter, or in the wire engine. These metals remain fixed, when exposed to the most intense action of fire, without diminution of weight, or sensible alteration. Such are gold, silver, and platina.”

We shall select, as a specimen from this part, the description of platina, not being so generally known as gold and silver.

“ SPECIES III.—*Platina*.

“ Platina is a white metal, but darker and not so bright as silver. It is heavier than gold, consequently the heaviest of all known bodies. Its hardness is inferior only to that of iron; and its tenacity, which is more than thirteen times that of

of lead, to that of iron and copper alone. Exposed to the fire, it is very nearly as fixed as gold. Neither water nor air occasions any alteration in it.

“ Platina is found in its ores in small grains or speckles of a blueish white, and always combined with iron, and possessing the magnetic property. So mixed, its specific gravity is 156017. In this state it is little malleable, but when perfectly purified from any extraneous substances, it is malleable enough to be worked in the flatter, or in the wire engine, and reduced to a very slender wire without breaking.

“ Platina is by no means fusible in a common fire. Exposed to the focus of Mr. Trudaine’s burning-glass, it has shewn only a beginning of fusion, by the conglutination of its grains; but Lavoisier has easily melted platina, by blowing the fire with oxygen gas. By proceeding thus, Lavoisier melted purified platina still more easily. In this state of purification its specific gravity is 195000, but when it has passed through the flatter its gravity is 220690.

“ Platina is soluble only in nitro-muriatic acid, or oxygenated muriate. The alkalies precipitate it from the solution.

“ A solution of muriate of ammonia, poured on a solution of platina, forms a precipitate of an orange colour, which is a true saline substance, entirely soluble in water. This property of the muriate of ammonia of precipitating platina, affords an easy and simple mean of ascertaining the alloy of platina with gold.

“ Platina can be mixed with many metals, but they render it brittle. Copper, however, if mixed in the proportion of three or four to one, forms with platina a very hard but malleable metal, capable of a high polish, and little liable to be tarnished.

“ Platina is a metal valuable for its great hardness, the high polish of which it is susceptible, and its inalterability. Speculums of telescopes may be made from it, much preferable

to those we use, because their polish is incapable of being tarnished. It possesses another very valuable property, that of changing but little its dimensions in different temperatures. For this reason it was very advantageously employed in the measurement of the arc of the meridian betwixt Barcelona and Dunkirk.

“ ORDER II.—*Semi-metals.*

“ The metallic substances, which have little if any ductility, and which, like the imperfect metals, are not fixed in the fire, are called semi-metals. Like the metals, they are very heavy; they melt by heat, and then have a lustre; by cooling they harden, and present a convex surface: but what distinguishes them from metals is, their being little if at all malleable, and the greater number of them being sublimed or reduced into vapour by the action of fire.

“ We know eleven semi-metals; viz. mercury, bismuth, cobalt, nickel, zinc, antimony, tungsten, arsenic, manganese, molybdena, and titanium.”

From these we shall give the account of zinc.

“ SPECIES V.—*Zinc.*

“ Zinc is of a very shining blueish white. Among the semi-metals it is one of the least brittle, and for this reason it is very difficult to grind it to powder. It possesses a certain degree of ductility, and even of malleability. It may be reduced to very thin plates under the flatter. In this state it is inflammable, and burns in the flame of a candle, imparting to it a blue colour mixed with green.

“ Zinc melts very readily in the fire, and long before it is red hot; it requires, however, a stronger degree of heat than is required to melt lead.

“ Zinc, treated in close vessels, is sublimed without decomposition; but calcined in the open air, its surface is covered with a gray powder, which is a true oxyd of zinc, and then its weight augments by $\frac{61}{100}$ of the original weight.

“ Zinc, heated to incandescence, emits a flame of a blue colour,

colour, and sublimes in white flakes, called nihil album, lana philosophica, pompholix, flowers of zinc.

“ Zinc is less heavy than mercury, bismuth, cobalt, or nickel. Its specific gravity is only 71908, but it is heavier than the other semi-metals.

“ Zinc is commonly mineralized by sulphur, and this ore is known by the name of blend, the specific gravity of which is 41665. Very often it contains iron. The crystals of blend assume a great variety of forms and colours; there exist red, yellow, black, and semi-transparent. Sulphate of zinc is the result of the decomposition of blend.

“ Zinc is found sometimes in the state of oxyd. If the sulphur be dissipated without producing any sulphate, its place is taken by oxygen, and this union forms the oxyd of zinc, known by the name of calamine. This oxyd crystallizes in hexaedral pyramids, or in tetraedral rhomboidal prisms. This is the only ore worked to obtain zinc, blend being generally neglected for this purpose. Iron is almost always found mixed in calamine.

“ If water be poured on zinc, when beginning to grow red hot, this water is decomposed; its oxygen oxydates the zinc, and a great quantity of hydrogen gas comes off.

“ Sulphuric acid dissolves zinc without the help of fire. Probably in this case there is a decomposition of water, because a great quantity of hydrogen gas is disengaged. By evaporation afterwards a salt is obtained, known by the name of sulphate of zinc, or white vitriol, or vitriol of zinc. This sulphate of zinc gives out its oxygen at a less degree of heat than the sulphate of iron does.

“ Nitric acid, even diluted in water, dissolves zinc with violence, and forms a very deliquescent nitrate of zinc. This salt melts on burning coals, sparkling, and then emitting a small red flame. Exposed to fire in a crucible, red vapours issue out of it, which are nitrous gas; this gas combines with the oxygen of the air, and the salt assumes the consistence of a jelly.

“ Muriatic

“ Muriatic acid acts on zinc with effervescence, and hydrogen gas is produced, as takes place with sulphuric acid; after this, black flakes are precipitated, which are muriate of zinc.

“ One part of zinc mixed with three of copper forms brass.

“ Zinc mixed with tin and copper forms bell-metal.

“ Zinc melted with antimony forms a brittle and hard alloy.

“ Fireworkers mix zinc with their compositions, to produce white and brilliant stars.”

In conclusion, the author gives an account of two primitive earths, omitted in the first part, strontian, discovered by Dr. Hope of Glasgow, and jargonic, discovered by Klaproth, in some jargon brought from Ceylon.

The reader will have observed, that the translator every where calls *silex silice*; but, on the whole, the work is very well translated: the few inaccuracies we find in the language are not such as to perplex the reader, or lead him into any error.

ART. II. *A second Essay on Burns; in which an Attempt is made to refute the Opinions of Mr. Earle and Sir W. Farquhar, lately advanced on the supposed Benefit of the Application of Ice in such Accidents: with Cases and Communications, confirming the Principles and Practice brought forward in a former Essay. Also Proofs, particularly addressed to Surgeons of the Army and Navy, of the Utility of the stimulating Plan in the Treatment of Injuries caused by the Explosion of Gunpowder.* By EDWARD KENTISH, Author of the former Essay. Octavo. 117 pages. MAWMAN, London. 1800. Price 3s.

A FIRST part this Essay was published in the year 1797. In that part the author examined all the different modes recommended by writers, or adopted in practice, in the treatment of burns. These he found to be so various and contradictory,

dictory, as clearly to evince they were not founded on any regular system or theory. They embraced every possible mode or variety that can be conceived, from a high degree of heat to the extremest cold. The applications were cold water or ice, in which the burned parts were immersed, or cloths wrung out of cold water were wrapped round the parts, and refreshed as often as they acquired much warmth, for many hours; vinegar, linseed or olive oil, lithargyrate vinegar, oil of turpentine, spirit of wine, &c. The practice of our author lying among the colliers at Newcastle, where the most dreadful accidents of this kind occur, from the explosion of inflammable air, he had opportunities of seeing all these different modes resorted to, although the most frequent of them was that of linseed oil. He soon saw, however, that the warmer applications, such as oil of turpentine or spirit of wine, were by much the most efficacious, and determined to adhere to them. At the same time he found it necessary to alter the internal treatment, which was entirely on the antiphlogistic plan, and consisted in bleeding, purging, and other reducing modes; for these he substituted a more generous diet, with wine and cordials, until, from the loosening of the eschars, or other circumstances, the life of the part appeared to be restored; then the diet was lowered, and occasional purges given to prevent the accession of fever. Having given this general idea of the author's doctrine, we shall lay before our readers one or two of the cases contained in this second part or essay, in which the author delivers an account of some improvements he has made in his practice. We shall also copy two or three cases from correspondents to Mr. Kentish, confirming the superior efficacy of his mode of treating burns.

The author, we should observe, has entered into an examination of the practice recommended in a late publication by Mr. Earle, (which, however, is a *very ancient* method of treatment,) and shews that the cases adduced by Mr. Earle, in support of his practice, are by no means adequate to that purpose.

“ Case.

“ Case. ”

“ October the 30th, 1798, George Clark, a workman in one of the mines upon the river Tyne, a young and vigorous man of five and twenty, from a quantity of inflammable air taking fire in the mine, was immersed for a considerable time in the flame of the burning air. He had neglected to put on drawers, which miners in general wear, and ought always to wear, and had on only a flannel shirt with sleeves, which had large holes in different parts of the arms. The shirt collar was open, and exposed the breast. In looking at the state of the individual we shall see how he was protected from the flame: his legs, thighs, posteriors, and privates, were all burnt; as were his hands, large spots upon the arms through the holes in the shirt sleeves, his neck, breast, and face. Immediately upon the flame ceasing to act upon him, he had a severe shivering fit, which lasted some time, and alternated with a violent sense of burning, from what I could learn, nearly every half hour, until he was visited, which was full three hours after the accident, which happened about eight o'clock in the morning. A draught, with sixty drops of laudanum and two drachms of æther, was given to him about eleven o'clock; and he was profusely bathed with heated spirit of turpentine for some time, over which were applied plasters thickly spread with digestive, rendered to the consistence of a thick liniment with the same spirit. He had a volatile cardiac julep to take a dose of every three hours; the anodyne was repeated at night with forty drops; and on the following morning, an hour before the time of dressing him, which was to be at nine o'clock, in case of thirst he was to have a glass of port wine, or wine and water, half and half.

“ October 31st (second day,) says he grew easier soon after we left him yesterday, but did not remain long so, as the pain soon after returned as violently as ever, and had done so by intervals ever since. Has had a good deal of thirst, and taken above a pint of wine besides his medicines. The face is

is very much swollen, particularly about the lips. The face of a person in the confluent small-pox, without the eruption, conveys an idea of his appearance; or, what is still more like, a certain stage of an erysipelas of the face. Some vesications upon the neck, which are all carefully punctured with the sharp point of a probe to discharge the serum. Some vesications upon the wrists and hands. The cellular membrane of those parts so puffed as to obliterate the feel of the artery at the usual place. His pulse, felt in the axilla, beats 130. Several vesications had appeared upon his legs and thighs, which were treated as the others. The left thigh, the buttock, and round the verge of the anus, seemed to have suffered the most: a dry brown eschar appeared in different parts of the thigh. From the aspect of the face I was apprehensive of some internal cause of irritation from having inspired the flame, and the appearances altogether seemed so formidable as to leave me little hopes of his recovery; yet being confident of the propriety of my practice, I had no hesitation in the manner of proceeding, though I might ultimately be foiled in my attempts of saving the individual. The dressings were the same as the day before; but, in addition, his lower limbs were laid upon large towels, covered with hot emollient poultices, which enveloped the thighs, and came over the plasters. Several bags of poultice were ordered to be applied upon any part, in case he found more pain there than in any other, particularly over the face. The internal treatment was continued the same, except that the æther was taken from his draughts, and he was ordered forty drops of laudanum night and morning; but to continue his wine, and have some panada, or both if he could take them.

“ November 1st (third day.) Has been very uneasy during the last twenty-four hours. His slumbers much disturbed; incoherent when he first awakes; and has been delirious at different times in the night. The puffiness of the cellular membrane of the face and hands still continues, and a degree of secretion

is appearing in places where the skin had been vesicated. This is the only favourable symptom that appears to-day: had it not been for this I should have thought him worse, as the functions of the brain seem very much affected. Probably the same irritation which has affected the whole of the apparent cellular membrane, even in external parts that are not burnt, may be communicated by sympathy to all that membrane which accompanies the nervous system, and forms that state of the sensitive powers which we observe in coma, and in some states of fever. This is what the experienced Dr. Clark, of Newcastle, terms engorgement of the brain. The pulse was still 130; the urine small in quantity and high coloured. He has had no motion since the accident. As his stomach will bear nothing but liquids, and as every thing now depends upon keeping up the powers of that organ, which is the great centre of sympathy, lest it should be put out of humour by cathartics, which might induce nausea, I ordered the bowels to be relieved by a clyster. The same dressings with the poultices were applied; and the diet and medicines continued the same.

“ November 2d (fourth day.) The clyster procured an evacuation, which gave him much relief. Has had an easier night. A considerable quantity of pus is formed on places where the cuticle was off. The eschar on the left thigh is beginning to shew a disposition to loosen. The dressings are changed to the unguent. e lapid. calam. made warm by exposing them to the fire, and applied as soon as possible after the others are taken off. Pulse 124. Urine more in quantity, but still high coloured. Tongue moist, and less thirst. There has been an astonishing change during the last twenty-four hours: the whole system, which yesterday was labouring, and appeared nearly overcome, with the least possible mark of secretion, has re-established itself in its ordinary functions, entirely, I believe, from receiving that assistance of drawing forth as it were every latent power of the machine. The extent and
scale

scale of stimuli have to the utmost of my power been continued from the beginning of this case to this period; always having in view to avoid as much as possible the inducing debility from excess. The stomach has fortunately assisted me much; and I must give a due proportion of merit to the application of caloric externally by the means of emollient cataplasms, though I must observe they were not used or meant as emollient, but merely as vehicles to convey positive heat, as they were applied above the plasters. I have never yet seen a case in which the benefits of both external and internal stimulation were so apparent, and I have no hesitation in affirming my belief, that, had a less active mode of practice been adopted, this individual would have been added to the thousands who have lost their lives by an opposite treatment. I wish to impress this strongly upon the minds of practitioners, as it may not fall to the lot of every gentleman to have an opportunity of making these comparative trials, and I wish my experience to be of use to such, and render it unnecessary for them to lose some patients before they become convinced of this truth. The wine was ordered to be withheld; the stimulating julep was desisted from, and only the anodynes continued; even these were diminished to thirty drops at night and twenty in the morning. Boiled bread and milk were ordered to be the chief of his diet; but a little ale posset was allowed, with the view of not too suddenly diminishing the great stimuli to which he had been accustomed. The poultices were likewise continued to-day.

“ November 3d (fifth day.) The appearances to-day give me great satisfaction. He has passed an easy night. The swellings of the face and limbs are much subsided; the functions of the nervous system seem restored to their accustomed action, and the secretion of pus is much greater than yesterday.

“ Having in several slight instances, since my publication, seen the good effects of powdered chalk as an absorbent, I

determined to try its power in this case. Some pounds of prepared chalk were accordingly finely powdered; I put it upon a plate, and placed it in an oven, in the patient's room, to acquire about the hundredth degree of heat of Fahrenheit's scale. Immediately upon exposing the surface of the wound by taking off the plaster, I threw on the surface of the sore as much chalk as would stick to the moist parts, and instantly covered them with the plasters previously heated. The poultices were desisted from to-day. His anodynes continued as before. Diet as yesterday.

“ On the sixth, seventh, and eighth days nothing remarkable happened, except that the secretion of pus, from the coming away of the eschars, was much more profuse; and on the latter day, on the different plasters, as near as I could ascertain, there would be at least a pint of matter. The diet and dressings, as well as the medicines, were continued the same.

“ Ninth day. The appearances in the morning the same as before; but in the evening his father came to inform me he had a looseness, which attacked him about noon. A pint of julepum e crêtâ, with two ounces of camphorated tincture of opium, was ordered for him to take a small tea-cupful of after each loose stool, and ten additional drops of tinct. opii to the night draught.

“ Tenth day. I found him considerably exhausted by the diarrhœa. He had had nearly twenty stools with great pain and irritation in his bowels. The rising to stool and the tenesmus had fatigued him much. The discharge by the bowels was not much at a time; after the first motion or two little feculent, but it had more the appearance of slime and matter. The most astonishing alteration was that which shewed itself on the diseased and secreting surface of the sores; instead of being deluged with pus as formerly, they appeared nearly dry. His pulse was slower than it had been for some time (under 100,) which it had not been before during the accident, and

was for some time up to 130. He was ordered to have rice-milk with a little cinnamon boiled in it, and to continue the julep with creta. To what law of the system can we ascribe this extraordinary appearance? That the ninth day in accidents of this kind has to me ever appeared critical, may be supposed, when I recollect the fatal termination of many cases on that day, as recorded in my former Essay, (vide chap. iii. p. 70.) I have likewise observed, in several diseases which are generally termed inflammatory, that about the ninth day a crisis happens. Is it that the system is fatigued by this action, and that an opposite state is required as a species of antagonism, such as we observe in the retina of the eye, which ceases to act, although the same stimulus is applied, and an opposite set of fibres take on the action from early association, as is beautifully illustrated by the ocular spectra in Darwin's *Zoonomia*? Or may this too abundant secretion of these extensive and superficial sores be looked upon as the same state of vessels which produces colliquative sweats, that in some states of the system alternate with diarrhoea? On the same principle perhaps we may account for the good effects of blistering in certain stages of inflammation of the head, chest, or abdomen, with a tendency to effusion. The counter-irritation seems to suspend the diseased action of the primarily affected part. Thus it is an observation frequently made by practitioners in inflammations of the breast, that a blister not only inducing irritation where applied, but also on the neck of the bladder, more effectually relieves the original attack.

“ Eleventh day. If the appearances of yesterday surprised me, those of to-day have done so equally, and at the same time given me infinite satisfaction. I represented the extensive sores as yesterday having ceased to secrete with that profusion which they had done for some days before; and if I may be allowed so to express myself, a sheet of skin has been formed over the very extensive sores which two days ago were

were discharging a profusion of pus. I am confident the quantity of new cuticle formed these last twenty-four hours on the different and distant parts of the body, would require more than a sheet of letter paper to cover it; a greater quantity of cuticle than I ever before have seen made in the same time. It appeared as if the balance of the exhalents and absorbents had been so nicely kept, and the skinning process had been so rapid, that the wound might be compared to the surface of an agitated lake, which, on a sudden subsiding to a perfect calm, is iced over in a single night.

“ The circumstance of the accidental diarrhœa has convinced me of a fact which might have remained long in obscurity, had it not been for this opportunity. It will be recollected by those who read my former Essay, that in the case of E. F. in the second mode of treatment, I mention his being above a twelvemonth under cure; and I there hazard a conjecture, that it was very materially owing to an ill-conceived prejudice which I had adopted, of supporting the system under that diseased action. This case convinces me that I was right in my opinion of that case being rendered so tedious by my being unacquainted with this law of the system. Chance has here unfolded to me the necessity of restoring the equilibrium of the system, by lessening the action of the arterial system, which prejudice would have prevented my daring to adopt. To have given a severe cathartic at this period would have appeared like madness in my eyes at one time; but now I look upon it as dictated by experience.

“ Little further need be remarked in this case. The parts continued to heal rapidly; and in less than three weeks from the accident (*i. e.* from the 30th of October to the 18th of November following) he was perfectly well.

“ This case is so decisive, 1st, of the advantages arising from the stimulating treatment to the establishing of suppuration; and, 2dly, of the extraordinary benefit to be obtained by desisting from that plan, when that process is established;

as to leave no doubt in my mind of the perfect consonance of this mode with the laws of the system. I wish others to benefit from it, and I shall be happy to hear the result, as I do not fear being put to the blush for the consequences."

The importance of the subject will apologize for the length of the above extract, and for our introducing to our readers some further cases and observations from this interesting publication.

" Case.

" A boy, aged 10, having his face and hands burnt from an explosion of gunpowder, I was sent for to see him in the country. His face was much burnt; the eyelashes and the hair of the eyebrows were much singed, more on the right side than on the left; the eyes were consequently exposed to the same effect, and he felt very great pain in them. They had applied oil to the whole of the burnt parts before I saw him, which might be an hour after the accident. He was in great pain; crying, shivering, and stamping about the room like a little madman. I gave him an anodyne immediately, and bathed the whole of the parts well with ol. terebinth. and dressed them afterwards with the stimulating ointment. He was immediately put to bed. I staid about half an hour with him, when he began to be easy. His anodyne was repeated at night. On the following day I found he had passed a pretty easy night. He was again dressed with the same ointment; in the course of two days more suppuration took place in parts about the right eye, and a great portion of the skin cracked and peeled off in scales. The dressings were changed to the absorbing ones, and in about ten days he was perfectly recovered, except a little tenderness of the eyes, which yielded to purges taken at proper intervals, and a collyrium with vitriolated zinc.

" I could add many more cases of the efficacy of this mode; but as they offer nothing remarkable, and were under my own care, they would only uselessly swell this work,
which,

which, I am afraid, may even now be thought too extensive. To surgeons of the army or navy, and those employed in naval or military hospitals, I cannot too strongly recommend this mode. From conversations with some public characters, I find a number of men are expended by explosions which happen in laboratories, in the field, and on shipboard. It will be some consolation to me to think, that if I have it not in my power to prevent the mad efforts of man in going to war, yet I may be the means of saving the lives or mitigating the sufferings of some of my species who were brought into such situations by a concourse of circumstances over which they have no control. I must here beg leave to pay the tribute of thanks due to Dr. Trotter for recommending my Essay to the attention of the navy surgeons. To his activity and investigation the public already owe much, and the spirit he has unfolded in the medical department of the navy leads us to hope for much more."

We shall conclude with the following letter from Mr. Horn, dated Newcastle, 25th July 1800.

" Dear Sir,

" I have great pleasure in communicating to you another instance where your method of treating burns has been successfully employed.

" George Smith, an underviewer in Ravensworth colliery, was severely burnt on the 3d July 1800, by a quantity of inflammable air taking fire in the pit, into which he had just descended to give directions to the workmen. The explosion was so violent as to drive up stones, &c. to the top of the shaft (above sixty fathoms;) and the shock was felt, and the report which accompanied it was distinctly heard by some farmers who were in bed in their houses, at some distance from the place.

" I found him two hours after the accident, with his hair singed close to his head. The whole cuticle was peeled off from his face and neck, which were quite black with the fine coal

coal-dust, which had been driven so forcibly upon them. He was burnt in different places about his loins, and from the knees to the ankles, except some small patches where the skin had only been scorched.

“ On looking at his hands I was shocked with their appearance: on taking hold of them, the skin and nails came off exactly like a torn glove, and the extensor tendons of the fingers were bare in several places. In short, he was the most severely burnt of any patient that ever came under my care.

“ Nothing had been done to him before I saw him, as he had only just been brought home. He had frequent shiverings; and, although a very resolute man, complained much of pain, and thought he must have been injured in his lungs, from the sense of heat he felt there, and from the bad taste in his mouth.

“ There was some strong gin and water on the table when I went in, and I immediately gave him a large tumbler glass full of it. I warmed some oil of turpentine, by holding a cup of it in boiling water, and I directed the attendants to bathe him assiduously with it, by means of probes armed with lint, and dipped into the spirit. This was continually done while I was employed in spreading plasters, (*viz.* ung. resin. flav. c. ol. terebinth.) and the poor man found much relief from it. He, however, complained much of his hands, which were very painful, and smarted at the time of the application, but soon had a much easier feel. I applied the plasters to every part where I suspected the fire to have reached, gave him another glass of strong gin and water, to which I added sixty drops of laudanum, and I desired he should have more of the spirit if the shiverings should recur.

“ In the evening I found him tolerably easy, and, considering his situation, wonderfully so. He had been my patient fourteen years ago, when he had been pretty much burnt, although not near so severely as at this time; and had then been treated with ol. lin. c. aqua calcis, to which a portion

of the tinct. opii had been added ; and he remarked, ‘ that the fire, he thought, seemed likely to be killed sooner now than before.’ He had taken gin and water only once since morning, when he had a return of the shivering, and his attendants had moistened the plasters with ol. terebinth. at his own request, from the relief he thought he felt from it. I gave him sixty drops of laudanum in a little spirit and water, to be taken at bed-time.

“ In the morning I found he had passed a tolerable night : I removed the plasters, and found some slight appearances of suppuration, particularly on the face, where a lardaceous appearance had taken place, but of a black colour from the coal-dust. I bathed the burnt parts again with the ol. terebinth. renewed the dressings, and allowed him gin and water, to be taken when shivering (which now and then threatened him) should occur. At night he took sixty drops of laudanum ; his bowels kept open, and he made no complaint of pain, except in his hands.

“ Third day. There is a tolerable suppuration on the face, neck, body, and legs. The blackness from the coal-dust, which appears to be firmly attached to the cutis, is separating fast, in the form of black lard. He remarks, that the fire is killed every where but in his hands. He was dressed with ung. resin. flav. with a less proportion of ol. terebinth. He is forbid the use of spirits, but allowed porter as far as three pints in the twenty-four hours, if he chooses so much. His anodyne is continued.

“ Fourth day. The suppuration in the face, body, and legs goes on well, and several parts are now turning florid, as the blackness disappears. The scorched parts have neither blistered nor run into suppuration. There is a large discharge of thin ichor from the hands ; and on some parts of the fingers there is still a thick gelatinous matter adhering. His allowance of porter is continued. He has no shiverings. Dressings are changed for cerat. e lapid. calamin. Anodyne continued.

“ Fifth

“ Fifth to the eighth day. Going on well; treatment continued; bowels open; allowance of porter diminished to a pint and a half per day.

“ Ninth day. Suppuration large; all the blackness gone off; discharge from the hands still thin, and in great quantity, attended with much pain. Prepared chalk, finely powdered, is ordered to be sprinkled on all the sores, covering it with cerate lap. calamin. spread on rags. He is to take five grains of calomel at night, and to have a purge in the morning.

“ In the afternoon I was suddenly sent for to him: the pain in his hands was intolerable, and he had two smart shivering fits. Having never before seen chalk applied, I attributed the pain to its use; but, on taking off the dressings, I found my assistant had not applied any of it to the hands. He had used it liberally to the face, neck, body, and legs, and these parts were perfectly easy. I ordered emollient poultices to be applied to the hands and arms, and renewed every eight hours. The chalk was continued to the other parts.

“ Tenth and eleventh days. The treatment continued. Pus on the face, neck, and legs of good consistence, and no pain in these parts. The hands are easier after the poultices are first applied, but soon become so painful as to make him urgent for a renewal of them; and when they are taken off the discharge of thin matter pours from them. Finding the chalk agree so well with the other parts, I sprinkled his right hand freely with it, and covered it with the cerate plasters. He felt, as he said, a little tingling from the application, and wished to have the poultice continued to the left hand. I was glad of the opportunity of making this comparative trial, and allowed it to be so.

“ Twelfth day. Head, neck, and legs much better; loins nearly healed. I speak within bounds, when I say four square inches of skin have been beautifully formed on one leg since yesterday. I know no term which will give so good an idea of this process as icing over; the extent covered, and the

smooth shiny appearance being so like an icy pellicle formed on a smooth piece of water.

“ Fifteenth day. Face and legs mending fast ; loins well ; his hands completely raw, and bleeding from every point ; the poultice on the left hand is deluged in thin matter, and this hand is by far the most painful. The right hand covered with the chalk, although painful, is not nearly so much so as the left, and the man is anxious to have the chalk applied to it, which is allowed ; anodyne continued ; five grains of calomel at night, and a smart purge to be taken early in the morning.

“ Sixteenth day. Has had two copious evacuations from the calomel and purging powder ; every part better ; the left hand much easier, but the granulations much looser than the right ; they bleed more readily, and are more painful.

“ Seventeenth day. One leg quite skinned over ; face and other leg much better.

“ Twenty-first day. The face and neck quite skinned over, except a small part of each eyelid, and the nose ; right leg almost healed ; right hand skinned over from above the wrist to the ends of the fingers on the inside, and much better on the back part ; left hand, to which the poultice had been so long applied, begins to grow better, but is far behind the other, so as to give a most decided preference to the chalk. He is now so well that I have allowed him to go into his garden.

“ You see, my dear Sir, that I have been tediously circumstantial in my account of this case. I now deem my patient so near well, that I shall discontinue my journal ; and I have only to add, that I have been so particular in my recital of the treatment, because perhaps you may have no case which furnishes such a fair opportunity for comparing your method with others commonly used. The poor fellow had felt the old method, with oil, &c. and was therefore well enabled to appreciate the present plan, especially as he is a man of great resolution, and of strong natural sense. You have also had frequent opportunities of seeing him during the cure, and of convincing

convincing yourself of the truth of every circumstance. And I think the trouble you have had in rescuing this important branch of practice from the rude hands who so long held it, will be well repaid, were it only with the reflections this case will give you. As a memento of my sense of the obligations the profession have to you, and to shew, as my poor patient says, there was 'ne bairn's play in this burn,' I will beg your acceptance of a preparation I have made of the skin and nails.

"I am, dear Sir,

"Very sincerely yours,

"FREDERICK HORN."

"There still remain some parts to heal in the above case, and I have no doubt Mr. H. will see, in the subsequent part of the cure, the benefit of cathartics. I have a pleasure in adding the opinion of Mr. Nelson, of Chester-le-Street, in the county of Durham, who has had very extensive practice in burns in the collieries on the river Wear: he says, when the sores have taken upon themselves the ulcerous disposition, nothing but repeated purging at due intervals has succeeded in enabling him to finish the cure."

ART. III. *Practical Observations on the Use of Oxygen, or vital Air, in the Cure of Diseases: to which are added, a few Experiments on the Vegetation of Plants.* By D. HILL, Fellow and one of the Council of the London Medical Society, and Honorary Member of the Medical Society at Guy's Hospital. Part I. Quarto. 58 pages. RIVINGTON, London. 1800. Price 7s. 6d.

THE author begins his preface with complaining of the difficulties he had to encounter in his endeavours to propagate and establish the knowledge of the efficacy of oxygen in the cure of diseases, owing to the prejudices and incredulity of the public. We own the complaint somewhat surprised us, knowing

knowing the extreme, we had almost said criminal, credulity of the people, to be obvious and demonstrable. And, we are sorry to add, that among the over-credulous, some names may be found we should not have expected, that is, some persons have ranked themselves among the believers of the numerous miraculous discoveries of the present day, from whom we should have expected more foresight and caution. In proof of this observation, we need only refer to certain names daily published, as vouching for the efficacy of the tractors, a species of deception that had lately been exposed, on examining into the pretended effects of animal magnetism, that we did not expect to see it again so soon revived. But a more ample proof of this credulity may be collected from the volumes of cases that have been published, of the efficacy of the nitric acid in the cure of syphilis, though it has not yet been demonstrated that one single case of *genuine* syphilis was ever permanently cured by that remedy.

This ready belief in the efficacy of new medicines is not, however, peculiar to the present time; it has prevailed in all ages, and persons have never been wanting to turn it to their advantage. And as cures will often be performed, or, more properly, persons will often recover from very severe, and apparently very threatening diseases, where none of the vital organs are materially injured, merely by the energies of nature, if assisted by rest and a proper diet; whatever medicine such persons may happen to be taking at the time will gain the credit of performing the cure. Hence the efficacy attributed to numerous drugs and compositions that we know to be totally inert, and incapable of effecting any change in the constitution. Hence, also, the predilection of physicians for different medicines, and often for those of directly opposite properties, in the cure of the same disease; each party grounding their opinion on what they call the infallible test of experience. The eulogium on the simple herb sage, *cur moriatur homo, cui salvia crescit in horto?* might not be the boast of
an

an empiric, to raise the reputation of a nostrum; but the serious opinion of some person, who, having put himself on a temperate regimen, of which sage tea formed a part, finding he had got rid of some obstinate chronic complaint, might attribute the cure to that beverage.

Although the author of the performance before us professes to rest the reputation of the oxygen gas on the credit of the cases here published; he is still willing to press into his service such auxiliaries as he thinks may further his views.

“What most surprises me,” he says, “is, that it is the fancy of particular individuals, and those who ought to know better, to depreciate this new application of vital air in the cure of diseases, as a sort of quackery, or novelty in the practice of medicine and surgery; and that they have no belief in its power or efficacy.”

But to shew the practice is not novel, he adds, “as my object is to call the public attention to the practical benefit of oxygen, or vital air, in the cure of disease; I shall proceed to shew how much this subject occupied the thoughts of the immortal Harvey, immediately after the discovery of the circulation of the blood.”

Then follows a quotation from Harvey’s *Exercitatio anatomica de Motu Cordis*, which we shall give as translated by our author.

“I began to reflect,” Harvey says, “within myself, whether the blood had a certain motion as it were in a circle, which I afterwards found to be true, and that it is pushed out and impelled from the heart through the arteries into the habit of the body, and all its parts, by the pulse of the left ventricle of the heart, as it is into the lungs through the arterious vein, on the right, and again flows back through the veins into the vena cava, and to the right auricle, in like manner as from the lungs through the artery called venosa, to the left ventricle aforesaid.

“Which motion we may be allowed to call circular, in the manner that Aristotle has compared the circular motion
of

of the things above, by the air and rain. For the wet earth heated by the sun sends forth vapours, these vapours wafted upwards condensate; when condensated they again descend in rain, moisten the earth, and by this means generations are here performed, and in like manner is brought on the rise of storms and of meteors from the sun's circular motion, his approach and retreat.

“ Thus, probably, does it happen in the human body, by the motion of the blood, that all the parts are nourished, cherished with warmth, and made to vegetate or grow, by the warmer perfect vaporous, spirituous, and (as I may say) alimentative or living blood: that, on the contrary, the blood in its passage through the different parts of the body, is chilled, coagulated, and as it were enfeebled, or made vapid, whence it returns to its principle, namely the heart, as to the source and inmost focus of the body, in order to recover its perfection. There, by the natural potent fervid heat, as in the treasure of life, it again becomes liquid, fraught with spirits, and, as I may say, with balsam, is again distributed from thence; and all these things depend on the motion and beating of the heart.

“ Thus the heart, the principle of life and sun of the microcosm, man (as proportionably the sun deserves to be called the heart of the world,) by the power of which the blood is impelled, moved, perfected, vegetated, and rescued from corruption, and becoming clotted; and that familiar inmate or good genius, the foundation of life and author of all things, performs its office throughout the whole body, by nourishing, cherishing with warmth, and vegetating it or making it grow.”

That the blood was warmed, invigorated, and perfected by the heart, and so rendered more fit to nourish the body, was believed by Harvey, as we learn from this passage; but that the heart received this power from oxygen absorbed from the air by the lungs, as our author seems to intimate, cannot be inferred

inferred from this or any other passage in his works. Quitting, however, this part, we shall proceed to take a cursory view of the cases. The first is of a child two months old, of a weak and delicate frame, who was afflicted for the space of three weeks with purging and vomiting: various remedies were given, but ineffectually; and the child was at length so reduced, “that it was supposed she must die in a few hours, or at least in the course of the night. Contrary, however, to all expectation, some slight remains of life were visible the next morning.” In this state, when certainly it could not bear to be moved from one room to another, if the above representation be correct, it was taken from Pall Mall to Russel Street, when inspiring a few mouthfuls of a composition of two parts in twenty of the purest vital air, a visible amendment appeared; and by a few repetitions of the dose it perfectly recovered.

The next case, of hydrocephalus, we shall give entire, with the author’s observations: only adding, it would have been more satisfactory, if Mr. Wachsel, who saw the child twice, had joined his testimony, to authenticate the preternatural enlargement of the head, and its subsequent contraction and diminution, in consequence of using the oxygen gas. As this is a disease that is by no means uncommon, and, when formed, so distinctly marked as not to be mistaken either as to its existence or extent; simple also, we believe, in its nature, so that a remedy which is found to be effectual in one case will scarcely fail in any subsequent ones; slow in its progress, the head going on increasing, sometimes, for four or more years, of which a remarkable instance is now existing in Lamb’s Conduit Passage, so as to give abundant opportunity for the trying the efficacy of any medicine; we trust we shall soon hear of more cures of this disease, effected in cases that have been examined by *other* professional evidence. The following is the narrative before us:

“ *Case of Hydrocephalus, in the Child of William Bennet, late of Berner’s Mews, now of N° 26 Devonshire Place Mews.*

“ This was a strong healthy child till six months old, when he was seized with the small-pox in the natural way. The epileptic fit common to young children previous to the eruptive fever lasted three quarters of an hour, accompanied with strong convulsive struggles, and much seeming pain and uneasiness in the head. The morning after this fit the small-pox appeared. With common nursing during the several stages of the disease, the mother to a certain degree recovered the child; but as it often happens, that, without proper medical aid, the constitution is much impaired, so it was in this child; for when the eruption was gone, the habit was very much exhausted, a great heaviness affected it, and there was a considerable inflammation in the white part of the eye, where a pustule had been.

“ The child was taken in this state to the Small-pox Hospital. Mr. Wachsel, the attendant apothecary, very judiciously ordered leeches to be applied to the temples, and several doses of physic, which soon recovered the eye. Shortly afterwards, however, the child began to appear more dull and heavy; his head gradually enlarged; the sutures, which had been united except the two fontanel, were beginning to lose their bony union; and his lower extremities were so unable to support his body, that every attempt to move him gave him great pain.

“ He was now taken a second time to the hospital. Mr. W. immediately discovered that the enlargement of the head proceeded from water lodged within it, and apprized the child’s mother of its fatal consequences. He, notwithstanding, advised more doses of physic, and some tonic remedy. The opening medicines gave him relief for a few days; but after that symptoms of oppression returned with great violence, when the same remedies were repeated, but with no good effect. The head being now wonderfully increased in size in
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consequence of the weight and pressure of the water on the brain, the paralysis of all the extremities was complete.

“ The child was brought to me in May 1796, then seventeen months old. On examining its head, I found the sagittal suture commencing from the nasal process, or bones of the nose, and extending through the os frontis or frontal bone, open to the full extent of half an inch. The other sutures connecting the several bones of the head were in the same proportion open, and expanded from their natural bony union into a wide membranous one, under which water was felt to fluctuate very readily. On any kind of pressure a convulsive motion of the body followed. His pulse was weak, and beat near 100 in a minute; and all his lower extremities were perfectly flabby, and motionless.

“ This deplorable case, on being presented to my view, appeared to me one of the most incurable diseases to which the human frame could be subject; and, from its extent, far more threatening than any I had ever met with during my practice. The child's total incapacity to inhale, even if vital air could act as a remedy, was the first difficulty I had to encounter. I therefore contrived to apply a tube to the body of my apparatus, closed the child's nostrils with my finger and thumb, made it cry, and as often as it took a deep inspiration forced the vital air from the apparatus into the lungs. This method succeeded completely; for warmth in the extremities was immediately felt, with a firmer pulse, and soft skin. The succeeding night he slept with much more composure than he had done for many months; and his mother observed that he made an unusual quantity of water.

“ From continuing the same dose of two parts of pure vital air to twenty of common air daily, in the course of a week he was evidently stronger, more lively, and his bowels, which from the general paralytic torpor had been disposed to great costiveness, were become quite regular. As the action of the air by this time had produced a white tongue, I ordered a

dose of rhubarb and sal polychrest, to clear the bowels gradually, by repeating it at short intervals. This soon cleared the tongue; the child ate a great deal heartier, and improved very much in appearance; the membranes soon became flaccid; and as the water gradually lessened, new ossific matter gradually closed the suture in the frontal bone. In a month the whole of the sutures, except the two fontanel, were again united by a firm bony union. The head being reduced nearly to its natural size, on the cause of its enlargement being gradually removed, the palsy of the lower extremities recovered. Tonic remedies were now ordered, so that by the middle of October he could stand and walk alone; and to so great a degree did the vital air renovate this poor little being, that he cut eight new teeth. This farther effort of nature appeared to be the only reason why he did not recover the entire use of the lower extremities sooner. Since his recovery, this child has had his thigh fractured: but his constitution has surmounted this accident, though he is rendered somewhat lame by the injured limb being shorter than the other.

Observations on the preceding Case.

“Vital air thus mechanically applied with the happiest effects in the last stage of this fatal disease, a disease too becoming more prevalent among children, with the phenomena of its thus imparting life to the blood, and exciting strong action in the heart and arteries, cannot fail to claim much attention, and give confidence in future practice. In the next place, it promoted an increase of all the secretions, by the skin, kidneys, and bowels. To these effects succeeded the restoration of natural sleep, the subsequent absorption of the water covering the brain, the renovation of the ossific process in uniting the various sutures of the skull; and lastly, the removal of all the paralytic affections of the arms, legs, and bowels. These facts must give greater insight into the laws of the human economy than could have been imagined.

“Many of these curious circumstances may perhaps admit
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of some farther explanation on chemical principles. In the first place, that matter of nourishment, denominated hydrogen by modern chemists, which, after solution or digestion in the stomach, is absorbed by the lacteals from the bowels, and conveyed by the thoracic duct to the left subclavian vein, and thus into the circulation, by the vena cava superior into the right auricle of the heart, exists in a weakly combined state in the blood, ready to unite with the vital air which the lungs are constantly receiving in respiration. This nourishing hydrogenous principle seemed in this child's habit to be in great excess. The chemical union of the oxygen or vital air with this hydrogenous principle, and perhaps with other substances in the blood, as carbone, &c. immediately let loose their latent caloric, and imparted a higher degree of temperature to the cold, weak, exhausted body, alike subdued in strength by the defect of mental or nervous energy, and by the weakened action of the heart and arteries. While the oxygen, or the base of vital air, by its union with the hydrogen, imparted this beneficial warmth to the body at the same time it formed water. This passing off by the secretions of the kidneys and skin, removed a cause of irritation that existed in the constitution, and produced quiet sleep. Thus by a mild repetition of this air, keeping up the action of strength, and supplying the consolidating principle to the habit, the absorbent vessels gradually took up the superabundant fluid on the brain. The arteries too were enabled to convey all the necessary materials for the secretion and deposition of bony matter, until the head was reduced nearly to its natural state, and freedom of motion was restored to all the paralytic limbs.

“ Considering this case in a practical view, it instructs us to imitate the laws of nature, by a mild, regular, and due supply of this principle of strength; aiming, at the same time, to support an equable degree of temperature in the body, and to keep up, by proper medicines, the important functions of the stomach and bowels; so that all the combined powers
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of mind, air, food, and medicine, may be made to act upon the various organs of the body, for the support of life and promotion of health, according to the general laws ordained by the Creator.

“ This curious subject cannot fail of interesting mankind, in proportion as the administration of vital air serves not only to restore and support life, but recover children from the two deplorable diseases already mentioned, as well as from many others, which will be laid before the public in the following cases.”

Nineteen cases of various kinds, but principally of scrofula or nervous affections, are detailed, all of them cured by the use of the oxygen, or recovering while inhaling it. Those patients that were young grew much faster, the author thinks, while under the process, than he had ever known any to grow in an equal space of time. The oxygen had the same effect administered to plants, of which he gives several instances.

Five engravings accompany the work, illustrative of some of the most remarkable effects of the gas, both on the human subject and on plants.

ART. IV. *Mémoires de la Société Médicale d'Emulation, séante à l'Ecole de Médecine de Paris, pour l'An v. de la République, (1797 v. st.) Avec une Planche en Taille-douce. Tome I. Octavo. 537 pages. MARADAN, Paris. An vi. Imported by DE BOFFE.*

THE publication of a second volume of this work, which is just come to hand, reminds us of our having neglected to notice the first, which now becomes unnecessary, the public having been so long in possession of it.

It appears, from a short discourse prefixed to the volume, that the society was formed in the year 1796, that it consists of sixty members, and an equal number of corresponding members;

members; in both classes we find the names of some of the most celebrated physicians, surgeons, anatomists, and chemists, not only in France, but in most parts of the continent of Europe. The characters of the memoirs contained in the volume are, as usually happens in collections of the kind, various; the number, however, of those possessing a considerable portion of merit exceeds those that are of a less interesting nature. In our next Number we propose giving an analysis of such of the pieces as appear to us to be most interesting, contained in the second volume.

ART. V. Dr. WILSON's *Treatise on febrile Diseases*, Vol. II.

(Continued from page 190.)

PROCEEDING in our examination of this volume, we come now to the fifth section, in which the author treats of the erysipelatous fever. But although he arranges erysipelas as a variety of synochus, yet, he says, on duly considering its causes, symptoms, and mode of treatment, it will appear that it ought rather to be considered as a combination of two complaints, synochus and Dr. Cullen's second species of phlogosis, the erythema; the eruption forming a much more important part of the complaint than in any of the preceding varieties of synochus.

“ In erysipelas the eruption appears in the form of a red blotch or stain, which spreads with more or less rapidity. The redness sometimes disappears on pressure; sometimes it does not, arguing the inflammation having spread deeper.

“ It is generally attended with a sense of burning and a pungent pain, but for the most part without tension or pulsation; and the inflamed skin is not raised above that which surrounds it. The parts beneath, however, as well as those in the neighbourhood, are generally affected with some degree of swelling, which often remains after the redness has dis-

appeared or removed to some adjacent part; for this eruption is apt to leave, or become less considerable on, the parts it first occupied, when it spreads to others. But in this respect there is much variety.

“ After the redness has been present for an uncertain time, blisters of various sizes sometimes rise on the skin, generally containing a thin, sometimes limpid, sometimes yellowish fluid. In some cases the fluid is viscid, and instead of running out, as generally happens when the blister is broken, adheres to and dries upon the skin.

“ In unfavourable cases these blisters sometimes degenerate into obstinate ulcers, which now and then become gangrenous. This, however, is a rare accident; for although it is not uncommon for the surface of the skin, in the blistered places, to appear livid or even blackish; yet the tendency to gangrene seldom spreads deep, and generally disappears with the other symptoms of the complaint.

“ The red colour changes to yellow as the eruption goes off, and the parts on which no blisters arose often suffer a desquamation. If the colour of the eruption change from a red to a purple or blackish hue, the prognosis is bad; but this is comparatively rare.

“ When the eruption has spread deeper than usual, suppurations sometimes take place; and it has sometimes happened, that erysipelas has renewed ulcers which had been long healed.

“ The period of the eruption at which the vesicles shew themselves is quite uncertain; the same may be said of the duration of the eruption. In mild cases it often gradually disappears, or is carried off by spontaneous sweating in a day or two. In some cases it continues without beginning to decline for twelve or fourteen days, or longer.

“ The erysipelatous eruption differs from the eruptions we have been considering, and agrees with inflammations, in appearing more frequently in synocha than in typhus. On this account

account it generally appears early in fevers; so that although we find authors differing about the time of its appearance, it seems to be generally admitted, that it seldom shews itself later than the fourth or fifth day; but within this period the time of its appearance is as uncertain as that of any other eruption which has been mentioned.

“ It sometimes appears after the fever has lasted only a few hours, in many cases on the second, third, or fourth day; and when the fever has begun to assume the form of typhus before the eruption shews itself, if the patient’s strength is not much reduced, it resumes that of synocha, the strength and the fullness of the pulse increasing, often attended with a considerable degree of hardness. Other inflammations supervening on the typhus mitior often have the same effect, a consequence that never attends any of the preceding eruptions, which all tend to increase the symptoms of debility.

“ As the erysipelatous eruption is most apt to attend the synocha, and as the more alarming fevers generally incline to typhus at an early period, it is in the milder forms of fever that this eruption most generally appears. But in erysipelas of the face, the brain is often affected before the inflammation shews itself externally. This inflammatory affection of the brain, while it induces coma, often preceded by severe head-ach, sometimes by a greater or less degree of delirium, at the same time increases all the febrile symptoms; so that although the fever which precedes erysipelas of other parts of the body is seldom alarming; that which precedes erysipelas of the face frequently is so.

“ In such cases we have every reason to believe that the inflammation, although it does not shew itself externally for some days after the commencement of the disease, is in fact the primary complaint, the fever being only symptomatic of it; and the treatment which has been found most successful, which is by no means that of an idiopathic fever, sufficiently warrants this opinion.

“ Erysipelas in general is not contagious, yet like other symptomatic eruptions, as well as certain phlegmasiæ, attends the prevailing epidemic, and then the fever is generally the typhus gravior. Mr. Bromfeild, in his *Surgical Cases and Observations*, mentions an erysipelas of the head, which was epidemic for two years, in which it was necessary to employ cordials and Peruvian bark, antiphlogistic measures generally proving fatal. Instances of epidemic erysipelas are also to be found in the works of Sydenham, Burserius, Tissot, and others.

“ From what has been said of the symptoms of erysipelas it appears, that in those cases where the affection of the skin has been present from the beginning of the complaint, or where the complaint has been attended from the first with coma or delirium, it is to be regarded as a phlegmasia; and universal experience has ascertained, that the treatment in these cases is the same as in other phlegmasiæ. The treatment in such cases, therefore, will be considered when we come to speak of the phlegmasiæ.

“ To the same place it is proper to refer the local treatment in erysipelas.

“ We are at present to consider how far the appearance of the erysipelatous eruption in the progress of synochus influences the treatment of this fever.

“ The appearance of the erysipelatous eruption in the first stage of synochus, that is, while the inflammatory symptoms prevail, the period at which it most frequently supervenes, occasions but little change in the mode of treatment, except that as the inflammatory affection of the skin increases the symptoms of synocha, the means of moderating excitement must be employed with greater assiduity. They are also safer than in other species of synochus.

“ It has been observed, that if the typhus has commenced before the appearance of this eruption, the symptoms of synocha are often recalled by it. They are not only recalled, but maintained,

maintained, for the typhus which supervenes towards the end of an erysipelatous fever is less considerable, in proportion to the preceding symptoms, than in other varieties of synochus; the erysipelatous fever in this respect also approaching to the nature of a phlegmasia: hence the effects of evacuations are less to be dreaded than in cases of synochus where no erysipelatous eruption supervenes. Sydenham did not scruple to employ blood-letting in erysipelas almost as freely as in any of the phlegmasiæ: how we are to proportion the evacuations to the state of the local affection will appear more fully in treating of the phlegmasiæ.

“ All that need be said at present is, that the more severe the local affection, that is, the greater the swelling, heat, pain, and the further the inflammation extends, especially if its seat be the head or trunk, and the greater the coma or delirium, the more powerful must the antiphlogistic measures be; provided the pulse continues full and strong, still more if it be hard, which is generally the case when the local affection is considerable.”

On the other hand, if the symptoms of typhus are prevalent, bark, wine, and the other remedies proper in that disease, must be persisted in.

In book the third and last of this volume, the author treats of the third order of idiopathic fevers, the exanthemata. Under this head are included small and chicken pox, measles, scarlet fever, plague, and urticaria or nettle rash. We shall notice each of them in the order they are arranged.

The small-pox are either distinct or confluent; these are again divided into a considerable number of varieties, principally from the appearance of the pustules. When the pustules are filled with a limpid colourless fluid, the disease is called *variola crystallina*; when they are flaccid, dry, and empty, *variola siliquosa*; when the pustules are hard and solid, *variola varicosa*; when petechiæ appear between the pustules, *variola petechialis* or *maligna*. Any of these ap-

pearances occurring when the pustules are confluent add considerably to the danger of the disease. In general the danger of the disease may be estimated from the number of the pustules, and from their cohering, or running together in masses, but particularly from the number of pustules appearing on the face.

“ The nature of the disease is best known,” the author tells us, “ and consequently the names should be determined from observing the state of the face. The danger is better ascertained by the number and appearance of the pustules there than on any other part of the body. If they be distinct and few in number on the face, even although they are in some degree confluent elsewhere, the disease is termed the distinct small-pox, and the danger is inconsiderable. If, on the other hand, there be a load of pustules on the face, if they run into each other, so that the face appears uniformly of a whitish colour, as if, to use Sydenham’s expression, it were covered with parchment, whatever appearance the eruption may have on other parts of the body, the complaint is termed confluent, and the danger is considerable.

“ Dr. Sims, in his Account of epidemical Diseases, even observes, that the danger was not to be estimated so much from the number of small-pox on the whole face as from that on the upper part of the forehead, about the junction of the hairy scalp with the smooth skin. If any were distinct there, and filled properly, little danger was to be apprehended.”

We shall pass over the account of the symptoms of the small-pox, as too well known to be necessary to be repeated here, and proceed to give an abridged view of the management and method of treatment recommended by the author, premising an observation or two relative to some peculiarities of the disease. Thus, our author says, it has been observed, that small-pox frequently precedes or follows seasons in which measles are epidemic: that if the measles attacks a person ill with small-pox, the progress of the small-

pox is sometimes interrupted until the measles has run its course, and then goes on through its different stages, commencing where it had been checked. Sometimes the reverse of this has happened, and the measles has been checked by the accession of the small-pox. The principal view in the treatment of small-pox is to moderate the eruptive fever, and thence prevent a redundance of pustules. For these purposes an emetic is to be given as early as possible after the attack of the disease, the bowels are to be kept open by the repeated exhibition of small doses of some cathartic salt; the diet is to be principally of vegetable substances, and the air of the room kept moderately cool. Sydenham recommended bleeding almost universally in the beginning of the disease; but this is thought now to be rarely necessary, or its use to be better supplied by moderate purging. Dr. Fowler recommends the use of mercurials, which, if persisted in until the mouth becomes tender, rarely or ever fails, he says, in making the subsequent disease more mild and tractable. The following observations on bleeding are judicious.

“ It is an observation,” the author says, “ with a few exceptions, universally applicable, that blood-letting is only to be recommended when the effects expected from it cannot be procured by other remedies. Of all the means employed by the physician, it is the most dangerous. There is no disease which tends more directly to impair the powers of life; and in the most dangerous cases it is often a doubtful point whether the disease, or the blood-letting which relieves it, is most to be dreaded.

“ It is true, indeed, that in most cases of unimpaired vigour, a moderate loss of blood is not attended with danger. But in the strongest its frequent repetition is always to be feared, and a prudent physician, as he cannot with absolute certainty foresee the course of almost any disease, and still less what new diseases may supervene, will choose to reserve so powerful a remedy in case symptoms should appear that
render

render its exhibition necessary. One of the first maxims in the treatment of febrile diseases is, to save the patient's strength as much as possible, that our practice may have sufficient latitude, if I may use the expression; when it is cramped by a debilitated habit, the danger is always great. I shall have many opportunities of illustrating these observations. What practitioner has not seen cases prove fatal, because the patient was too weak to bear the loss of a few ounces of blood?"

When the eruption is completed, the cooling process above recommended may in general be intermitted, and a somewhat more invigorating diet indulged in, to assist in maturing the pustules; for which purpose a mild paregoric may be given at night, which in the more simple form of the disease will be all the medicine required.

"On the other hand," the author observes, "if the febrile symptoms continue considerable, notwithstanding the appearance of the eruption, the plan of treatment must not be relaxed. The continued use of cathartics and the cool regimen is then necessary; and as, at an early period, they are the best means of moderating the eruptive fever, they are now the most effectual for preventing the appearance of the secondary, which is always to be feared where the remission on the completion of the eruption is inconsiderable."

The author next proceeds to treat of small-pox, attended or complicated with typhus fever, in which the warm cordial diet and regimen must be adopted; but for the directions under this head, and the treatment of particular symptoms, we must refer our readers to the work, and shall conclude our account of this disease with giving the appearances that have been found on dissecting the bodies of persons who have died of the complaint; which we rather select, as it will serve to correct some erroneous opinions as to the parts liable to be affected by the disease.

"In those who have died under a load of pustules, the
nares

nares and inside of the cheeks are often found covered with them, and the teeth are besmeared with a thick viscid saliva. Pustules are frequently observed on the upper, very rarely on the under part of the tongue, which is better moistened with saliva; the palate is often covered with them; they also frequently occupy the more external, very rarely the internal parts of the meatus auditorius.

“ The maxillary, frontal, and other sinuses of the face are free from any morbid appearance. The cellular substance of the face, as well as of other parts of the body, especially where the swelling is most considerable, is distended with a serous fluid as in anasarca.

“ On removing the cranium, the dura mater appears perfectly sound; but the vessels of the brain, as in most other cases where coma is a frequent symptom, appear more turgid and filled with a darker coloured blood than usual, and a greater quantity of serous fluid is found, particularly towards the base of the brain: ‘ Circa infundibulum, integra illa arachnoideæ vagina quæ nervos tertii paris, adsitasque partes concludit, saccum aqua plenum referebat.’ In other respects the brain is generally sound.

“ On examining the parts situated in the neck, the œsophagus is found free of pustules, even where the pharynx is loaded with them; or if any be observed in it, they are towards the upper part. The state of the larynx and trachea is often very different. These, with the bronchiæ as far as their third division, are sometimes more or less loaded with pustules, from which, and the state of the nares, we readily account for the dyspnœa and cough which frequently attend this disease. It sometimes happens, however, even in the worst forms of the disease, that the windpipe is free from pustules. Tissot says, he has dissected some so covered with pustules, that there was scarcely room for one more, without finding any pustules in the larynx or trachea. The trachea is sometimes covered with a whitish crust, which is easily separated,

rated, and the secretion from the bronchiæ is now and then tinged with blood.

“ The fluid of the pericardium is also sometimes tinged with blood, and small particles like coagulated blood broken down now and then appear floating in it. The surface of the heart has been found rougher than usual, and polypi are sometimes found in its cavities. It is doubtful if any of these appearances be essentially connected with the disease. With respect to the last, it is a common appearance after death, whatever be the complaint of which the patient dies. The lungs have often a darker appearance, and their moisture is more copious than usual. When no inflammatory affection has supervened, they are in other respects sound. The form of the thorax has been observed considerably affected by enlargement of some of the abdominal viscera; this seems to be merely accidental.

“ The various parts, as the mouth, pharynx, larynx, trachea, &c. which are sometimes covered with pustules, are now and then in the worst cases affected with gangrene.

“ There are but few morbid appearances in the abdomen. In the stomach there is sometimes found a thick whitish matter, which also frequently besmears the œsophagus; but this is a common appearance of mucus when it has lain in these cavities for a considerable length of time. In examining bodies we often meet with morbid appearances which cannot be regarded as the effects of the disease of which the patient died, as they are not observed in perhaps one of fifty cases. Thus in those who die of the small-pox, the liver is sometimes enlarged, sometimes soft, at other times hard and gritty, now and then hydatids are found in it. The state of the bowels also varies; worms, for example, or traces of inflammation, are sometimes found in the stomach and intestines. None of these appearances throw any light on the ratio symptomatum, nor indeed seem at all connected with the disease.

“ What principally demands our attention in the abdomen is,

is, that pustules are never found on any of its viscera. Some have asserted the contrary, but it appears probable from the observations of Cottunnius, that they had mistaken small lymphatic glands for pustules. He dissected forty bodies in the presence of several people, without observing any pustules on the stomach or intestines. ‘Did variolous pustules,’ Dr. Walker remarks, ‘invest the external membrane of the lungs, liver, stomach, or intestines, and pass through the common stages of inflammation and suppuration, we might expect a regular course of complaints more urgent and distressing than what occurs on the surface of the body; but we never find this to be the case.’

“It appears, then, that variolous pustules never attack the cavities of the body, except those to which the air has free access, as the nose, mouth, trachea, the larger branches of the bronchiæ, and the outermost part of the meatus auditorius. It has also been observed in cases of prolapsus ani, that pustules very frequently attack that part of the gut which is exposed to the air.

“Cottunnius alleges, that pustules appear only on those parts which are exposed to the air, because moisture prevents their appearance; and in confirmation of this opinion, he observes, that if the eyelids be kept moist by wet bread from the first attack of the disease, pustules never appear upon them; and by the same means, he alleges, pustules may be prevented on other parts. This opinion, however, is invalidated by the fœtus in utero being subject to the variolous eruption.

“The seat of the pustules is neither the true skin nor the cuticle, but the mucus which lies between them. The author just mentioned made frequent dissections in order to determine this point. ‘Quoties pustulam incipientem dissecui, vidi cuticulam elevatam ad pustulæ formam, cutis corpore intacto, et tumoris immuni.’ The seat of the pustules, a question

at one time much agitated, is thus very accurately ascertained; but this knowledge has not hitherto improved the treatment of the disease."

(To be concluded in our next.)

ART. VI. C. F. CLOSSIUS *ueber die Lustseuche: i. e.* C. F. CLOSSIUS on the Venereal Disease. Octavo. 448 pages. 1797. Imported by ESCHER.

DR. Clossius having lately delivered a course of lectures on the venereal disease, at the university of Tubingen, was induced to submit the substance of them to the examination of the public, in the volume before us. The author disclaims all pretensions to new discoveries relative to the subject of his treatise, and only assumes the merit of having made a careful selection of the most approved observations of his predecessors, which he has verified by his own experience and investigations. Frequent references are made to the works of the most eminent writers on the venereal disease, which give a very favourable idea of the diligence and discrimination of the author. The arrangement of the subject is judicious, and the manner in which they are treated clear and concise. No formulæ of medicines are inserted; nor have we met with any thing in the work which can appear particularly novel or interesting to the well-informed part of our readers.

ART. VII. *Answer for the junior Members of the Royal College of Surgeons, of Edinburgh, to the Memorial of Dr. James Gregory, Professor of the Practice of Physic in the University of Edinburgh, Physician to the King for Scotland; and one of the Managers of the Royal Infirmary of this City.* Octavo. 159 pages. Printed for HILL, Edinburgh. CADELL and DAVIES, London. 1800.

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ART. VIII. *Observation on the Mode of Attendance of the Surgeons of Edinburgh on the Royal Infirmary, in a Letter addressed to the Royal College of Surgeons.* By BENJAMIN BELL, Edinburgh. Quarto. 24 pages. With an Appendix, containing further Remarks on the surgical Department of Hospitals. 11 pages. Printed by NEILL. 1800.

ART. IX. *Remarks on the present Mode of chirurgical Attendance in the Royal Infirmary of Edinburgh: submitted to the Consideration of the Royal College of Surgeons there.* By JAMES ARROTT, Member of the College. Quarto. 14 pages. Edinburgh, printed by NEILL. 1800.

ART. X. *Outlines of a Plan for the Regulation of the surgical Department of the Royal Infirmary: submitted to the Consideration of the Managers of that Institution.* By JOHN THOMSON, Fellow of the Royal College of Surgeons, Edinburgh. Octavo. 14 pages. Printed by STEWART, of Edinburgh. 1800.

WE have classed these four publications together, because they all relate to one subject, viz. the heavy charges and complaints made in a late "Memorial," of which we have already laid the contents before our readers. (*See London Medical Review and Magazine, Vol. IV. p. 184.*) As we profess and endeavour to be impartial in all our decisions, while at the same time we determine to keep clear of all party disputes, it cannot be expected of us to offer any opinion on the subject here brought forward; all we shall attempt, is to exhibit an outline of the controversy, as it is stated by the respective combatants.

Mr. John Bell's "Answer for the junior Members of the Royal College of Surgeons" was written at their particular request, "for the purpose of doing away those gross misrepresentations of the character and conduct of the younger

surgeons, contained in the said Memorial ;” but circumstances having occurred previously to the answer being prepared, which rendered the publication of it unnecessary on *their* account, Mr. J. B. has thought proper, he says, to print this reply in vindication of “ his own private character,” and as “ an answer to one of the most wanton, daring, and illiberal attacks that ever was made upon any profession.” The first section, which extends to fifty-seven pages, is in reality no answer at all ; but merely a detail of the alleged cruelties and grievances sustained by the College of Surgeons, interspersed with acrimonious and witty reflections, by way of retaliation.

In the second section, which carries us fifty pages further, the author has described “ the nature of that connexion which essentially subsists betwixt hospitals and schools of medicine ;” and here again we find a great deal of extraneous matter, dressed up in very spirited language, but not immediately relating to the main question. Toward the conclusion of this section, however, the author shews that the College of Surgeons have very greatly benefited the Royal Infirmary, and that they have a just claim on its managers to be admitted as attendants, if not as operators, in rotation. The connexion which subsists between the Infirmary and the College is such as we had not the smallest idea of ; and it seems to us not improbable, from the statement here given, that, “ should the Royal Infirmary lose its connexion with the College of Surgeons, it would lose its surgical patients, it would lose its numerous surgeons and their pupils, it would lose the splendour of operations, and all that part of the profession which makes the most sensible impression on the public mind : the well-frequented hospital would degenerate into a melancholy, silent place, more like a workhouse than a medical school !” The Memorialist, indeed, has observed, “ that the surgeons succeed each other in rapid succession every two months :” to which Mr. Bell replies, “ It is true, but where the surgeon is changed, his assistant usually succeeds him ! Each surgeon
begins

begins to attend the Infirmary a month before his term of duty arrives, and he does not cease to attend till those upon whom he has performed any great operation, are well. Though the surgeon is changed every two months, the patients are permanent; the practice is steady, rational, and consistent; numbers of surgeons are in constant attendance in the consultation-room, to assist the attending surgeon with their advice; he often appeals to them, and there seldom passes a day in which he does not bring patients with various complaints into the consulting-room; either to consult about their cases when they are received, to remark to his fellow-surgeons any remarkable changes in their diseases, or to shew their condition before they are discharged."

The third section contains "a vindication of the character of the younger surgeons." But, since the Memorialist, Mr. J. Bell tells us, "knows no surgeons, has seen no operations, and never enters the wards" of the Infirmary, "where those daily cruelties are perpetrated," which he imagines may exist, we think this task of justifying the professional conduct of the younger surgeons might have been declined. This part of the book, however, may be read by young practitioners with advantage. It is written in a sensible and animated manner; and contains many excellent hints on chirurgical education, &c. &c.

The next pamphlet we are to notice is that of Mr. Benjamin Bell. He is of opinion that the managers of the Infirmary entered into an agreement with the College of Surgeons, which their charter did not warrant; and, therefore, that the College ought now to relinquish their claims or rights, depending on that unguarded compact. He further recommends the managers to elect four senior and two junior surgeons, who shall have the constant charge of the whole chirurgical department of the Infirmary intrusted to them; of whom the two oldest are to do the daily business; and, when prevented from acting, the other two surgeons, or their assistants, are to officiate in
their

their stead. Some other regulations, of an inferior kind, are likewise suggested by the author: and the whole is closed by an appendix, in which are stated the result of inquiries made by Mr. Benjamin Bell, of several physicians in London, Manchester, Liverpool, and Newcastle,—all tending to establish his own sentiments. We copy the concluding observations, in which the author's opinion is summed up in a few words:

“ 1. Whatever the mode of attendance for the surgeons of our Infirmary shall be, no greater number should be chosen than is necessary for the hospital duty: more would unquestionably do harm.

“ 2. Four surgeons, that is, two ordinary or acting surgeons, and two assistants, might be sufficient for a greater number of patients than are at any time admitted to our Infirmary; but this advantage would be derived from the appointment of four senior surgeons and two assistants, that, in the absence of the acting surgeons, no important part of the business would devolve on the assistants.

“ 3. All the surgical business of the hospital should be conducted by the two acting surgeons, during the whole course of their appointment; nor should the other two senior surgeons be desired to attend, but for the purpose of taking charge of it, when the others are from necessity absent; or at operations, or such cases of consultation as are singular and important.

“ 4. With the further view of preventing misunderstanding and disagreement, each of the two acting surgeons should attend his own patients only, and never visit those of the other but when desired; nor should any other surgeon in town, not even surgeons acting as managers, be allowed to visit the patients of either of the surgeons without their concurrence. Neither should strangers be ever allowed to attend at consultations.

“ 5. The junior surgeons, whether attending for periods of long or short duration, should not only take charge of all dissections,

dissections, of which they ought to keep an accurate account, but should daily examine and correct the written statement of cases taken by the clerk on the preceding day, which once every week should be inserted in a ledger, to be kept as a record.

“ The junior surgeon in attendance ought also to see that the instruments for operations are kept in order, and that a sufficient supply of bandages, and other parts of the surgical apparatus, is always in readiness; by which the whole business of the department would be conducted with ease to the acting surgeon, which could not otherwise be the case.

“ 6. One or both of the acting surgeons should be permitted to give clinical lectures on the cases of the patients; or, in the event of their declining this privilege, it should be allowed to one or both of the other senior surgeons, who, in giving lectures on the cases, would be obliged to attend daily, although with no liberty to prescribe or give directions. It might even be proper to admit of this privilege to the junior surgeons, if all the others should refuse it; but at no period, or in no circumstances, should clinical lectures be given by more than two surgeons in one year.

“ 7. Much benefit may be derived from accurate attention to the admission of patients: with which view, the business of the waiting-room should be managed alternately by the two acting surgeons; each to attend, one, two, or three months at once, as may be agreed on; all that are admitted on each day to be equally divided between both surgeons; and in cases of doubt, a consultation to be immediately held with the other acting or ordinary surgeon, and the assistant; so that none shall ever be admitted, which are not evidently proper for hospital practice.

“ 8. It would add greatly to the ease of doing hospital business, were the whole of it put over in the morning: the time of attendance might be either seven or eight, from the beginning of March till the end of September, and nine o'clock during

during the rest of the year; by which an hour would be gained daily, by the duty of the hospital being finished before the ordinary time of paying visits to private families; while no time would be lost, as daily happens at present, when, in the most busy period of the day, both the physicians and surgeons are obliged to leave those parts of the town in which they are at twelve o'clock, perhaps to return to them again on their attendance at the hospital being finished.

“ 9. Although every member of the College of Surgeons would be willing to do the duty of the Infirmary without fee or reward, if the funds of the institution did not admit of their being paid, I am induced to believe that it would be both for the credit and interest of the hospital, that a moderate allowance should be made to them; to the extent, perhaps, of fifty pounds yearly to each of the ordinary or acting surgeons, and of half that amount to the assistants.

“ The surgeons giving clinical lectures should likewise be allowed to take fees from their pupils; but as the duties of the other two senior surgeons not in charge of the business, would be inconsiderable, no pecuniary allowance to them would be necessary from the funds of the hospital.

“ These payments to the ordinary and assistant surgeons would be in a great measure, if not entirely, compensated by that minute attention which three surgeons in daily attendance would be enabled to give to every part of the business, which it is not in the power of a single person to do; a considerable part of it might be raised by the dressers being made to pay more than other pupils, as is done in all the hospitals of London; clinical lectures undoubtedly add to the number of pupils attending the hospital; and if all of these modes of raising it should prove deficient, more than the whole sum might be easily obtained from the public.”

The “Remarks” of Mr. Arrott tend to shew that the connexion subsisting between the College and the Infirmary was not entered into in an unguarded moment, as Mr. Benj.

Bell

Bell insinuates; but was a deliberate act, the result of much previous attention and negotiation. He reprobates (in temperate language) the proposal of Mr. Benjamin Bell, for the College of Surgeons to abandon their rights of attendance by rotation, and disapproves the plan which this gentleman has suggested. The proposal of Mr. Arrott is as follows:

“ 1st, The members of the College may be divided into two classes, seniors and juniors. The senior class to be composed of those gentlemen who have taken charge of the Infirmary four terms, or more frequently, from their entry with the College: the junior class, of those gentlemen who have not had this charge so often. The gentlemen of the senior class, from the head of the list of surgeons to Mr. George Wood, (with whom I propose to begin the class of juniors,) who may be inclined to take a charge in the hospital, cannot be supposed to exceed ten. Of the gentlemen of the junior class, there may be found, I suppose, about twenty willing to officiate in the hospital.

“ 2dly, Six surgeons may be elected by the managers, to take charge of the chirurgical branch in the hospital: two from the class of seniors, and four from that of the juniors. The two surgeons from the senior class are for consultation, and advising the juniors respecting operations, medicine, diet, &c. who are to be regulated entirely by their advice. The managers ought not to be under restriction in the election of the two seniors. As to the four juniors, they ought to be elected from those gentlemen who have already most frequently had the charge of the hospital. The two senior of these four, to be the operating surgeons, and to prescribe medicines, diet, &c. with the advice and concurrence of the two surgeons from the senior class; they shall divide the chirurgical patients between them, by each taking one side of the wards, as the physicians do. The two junior surgeons to be their assistants, and to officiate for either of them, in case of absence.

“ 3dly, One of the two gentlemen acting as consulting
VOL. V. N° XXIII, M M surgeons

surgeons shall retire at the end of one or two years, as found most convenient, to give place to another surgeon from the senior class, to be elected by the managers, without any other restriction than that they shall not re-elect any person until they have gone through the list of the senior class.

“ 4thly, The two first of the juniors or operating surgeons shall also retire at the end of one or two years, to give place to the two assisting juniors, who are now to be the operating surgeons, and to be assisted by two new juniors, chosen by the managers from those gentlemen of the junior class, who have most frequently officiated in the hospital, as above: and in all future elections, the same rules to be observed by the managers.”

Mr. Thomson, the last writer we have to notice, is so candid as to acknowledge “ that the sick and diseased poor, admitted into the surgical wards of the Royal Infirmary, do not receive all the benefit which that institution holds out to them, which the public intended they should receive, and which a different arrangement in the plan of surgical attendance might undoubtedly ensure.” He points out many inconveniences to the patients, arising from the old established plan of attendance; and likewise objects to the appointment of two or more *permanent* surgeons, as being liable to consequences not less pernicious. To avoid the evils enumerated by the author, he accedes to the idea suggested by Mr. Andrew Wood, (in a motion he made to the Royal College, September 6, 1800,) that a certain number of the members should officiate in the Infirmary for a limited time, one going out by rotation at the end of a fixed period.

“ To carry this plan of attendance into effect, it is proposed, that six surgeons be appointed to the Infirmary, two to act as ordinary surgeons, and four as their assistants.

“ That one of the ordinary surgeons shall go out every eighteen months, and that his place shall be filled up by the oldest assistant.

“ That

“ That the two ordinary surgeons shall divide the surgical patients, and their public duties in the Infirmary, in the same manner as has been done for a long time by the physicians.

“ That the office of the assistants, as the name imports, shall be to attend and assist the ordinary surgeons in their operations, and other public duties.

“ That in the occasional or necessary absence of the ordinary surgeon, the oldest assistant shall take charge of his department, and act in all cases as the ordinary surgeon.

“ That, in all cases requiring operation, a consultation shall be held of the six surgeons belonging to the Infirmary, who, in cases of extreme difficulty or danger, shall be at liberty to call in the advice of some older and more experienced consulting surgeons.

“ That this body of consulting surgeons shall, at present, be chosen from the older members of the College; but that in future, their places shall be filled up with such surgeons only as have gone through their term of public duty in the Infirmary.

“ That, instead of a fixed salary to the two ordinary surgeons, they shall be allowed, in the first place, to appoint and to receive fees from the dressers, who are to serve under them in the hospital; and in the second, that each ordinary surgeon be allowed to give a clinical lecture, weekly or oftener, in which he shall explain to the students the nature of the cases admitted into his wards, and the reasons of his own practice; and that, in the event of the ordinary surgeon declining the privilege of lecturing, it shall be permitted to one or other of the assistants to perform that duty.”

We cannot doubt that, in consequence of these and other discussions, which have been occasioned by Dr. Gregory's “ Memorial,” the managers of the Infirmary will adopt such measures as may ultimately secure to the objects of their protection the important advantages which so noble an institution is calculated to afford.

MEDICAL CORRESPONDENCE.

(Communications for this department will be gratefully received.)

Art. II. *Authentic Information relative to some extraordinary Cases of the Cow-pock at Clapham.* By Mr. PEARS, F. M. S. &c. *With a Postscript by the EDITORS.*

To the Editors of the London Medical Review and Magazine.

GENTLEMEN,

THE attention which has been so generally excited in the medical world by those cases of cow-pock* that have lately occurred in the neighbourhood of town, and from the inoculation for which it was asserted that one had died, has made the ascertainment of facts an object of much importance. This is the more necessary, on account of the very imperfect and unintelligible statement which has appeared in the Med. Journ. for Dec. p. 448. For although Dr. Lettsom, in his letter at p. 567, calls it an "accurate statement," it is generally thought so much otherwise, that, from my own information and that of others, it is not either intelligible or adequate to the purpose of giving any proper idea of the cases represented. It is to be lamented, therefore, that such respectable names should have been affixed thereto; as the relation detailed differs so materially from those facts delivered by the parties themselves, whose authorities I have for the following account, which is very much at your service, if you should honour me so far as to favour me with its insertion in your next Number.

On November 22d it was mentioned by Mr. J. H. Hooper, at the Physical Society, in Guy's Hospital, that Dr. Lettsom had told him of some cases of cow-pock having lately happened at Clapham, which had terminated fatally. From the

* I have taken the liberty of using the term *pock*, as I conceive the word *pox* to be inapplicable, being the exclusive appellation of syphilitic affections.

information with which Mr. H. afterwards favoured me, I determined to investigate the nature of these cases, with the hope of finding the same favourable termination I had experienced in other similar inquiries. As the particulars have in part been laid before the public, and the following ones are authorized to furnish the remainder, it would be an ill-timed reserve as well as partial injustice, to entitle them any other than the *Clapham Cases*.

On the 27th instant I made it my business to visit Mr. Buckland, of the above place, whom I had not the pleasure of knowing before; he politely offered to give me every information in his power, favoured me with a direction to his patients, residing in Thunderbolt Alley, near Samuel Thornton, Esq. and kindly promised to follow me (being then engaged,) to assist in the prosecution of any inquiries I might wish to make. From the different parties concerned, I received the following account—beginning with the case of that child who died, and which was thus circumstantially detailed by the mother.

James Hall, eleven weeks old, was inoculated for the cow-pock by three scratches in the right arm, on Wednesday, Oct. 22. It appeared on the following Sunday, 26th, to have taken effect. Each of the places inoculated became yellow, enlarged, and rose with a fine head, having a thick matter like cream. They continued rising until the following Friday, the 31st, being five days after its appearance, and the ninth after inoculation. On this day (31st) Mr. B. took some matter from this child to inoculate his brother William, and also a nurse child, named Sarah Ann Keene, both of whom were in the same house with the above James. “From the very day, hour, and minute,” says the mother, “that the lancet was introduced to take the virus, the part inflamed more, had a visible, pulsatory, throbbing motion, with alternate flushings †;

† This appearance, so accurately marked here by the mother, and which I have frequently seen, has been very generally overlooked, or but superficially noticed.

and on the next day, Saturday, November 1st, the child became feverish, with an affection of the head, &c. and other symptoms of general irritation. The inflammation extended much; and on Sunday, November 2nd, it reached from the shoulder to the fingers, extending over the breast and back. It proceeded downward, and, after covering the body, had extended nearly as far as the knees; but before it had reached those parts, the child died, on Sunday the 16th instant, and was buried on Thursday the 20th. This child was of a weakly habit, but in good health‡. The pock was fine, and proceeded well, until the lancet was introduced for the virus; the inflammation being the size of an half-crown piece, and the head of the pustule about the size of a silver penny. On Thursday the 13th instant, before the child died, the surface of the body became discoloured, yellow, &c. and, on the day before its death, was seen by Dr. Blackburn, of Balaam Hill, who ordered a common poultice to be applied all over the inflamed surface. This was applied from that time, seven o'clock on Saturday evening, until five on Sunday afternoon, when the child died. The child refused any internal administration. After death, the extent of inflammation was distinguishable by the different colour of the skin."

This very circumstantial account was delivered by the mother, whose particular and regular detail almost precluded the necessity for further inquiry. The two following ones are from the same source.

William Hall, brother to the above, was inoculated from him, by fifteen scratches* in the right arm, on Friday the 31st instant, and on the Sunday following, November 2nd, each of the fifteen places became yellow. On the following Thursday (the 6th instant) the child was taken ill, had fever, affection of

‡ No marks of scrofula were apparent in the brother of this child—William, or could be collected from the mother's account of each of them.

* Mr. B. denies this assertion. See his account at p. 282.

the head, and general pain throughout the body, particularly in the arm inoculated. The inflammation extended all over the back, and from the shoulders to the loins. It then abated, “left him for a few days,” as the mother states, after which it returned again on the shoulder, and went down the arm. Each of the places scratched by the lancet “became bad,” and broke into one wound, which now appears to extend three quarters of an inch in length, and half an inch in width, (of a quadrangular figure,) having in its centre an incrustation or scab of a reddish brown colour. Near this wound are likewise two other conjoining circular marks, left by pustules that had united. The child is now well, but weak. The ulcerations were much relieved by carrot poultice, applied by Mr. B.

Sarah Anne Keene was inoculated from the above James, and at the same time with William, in fifteen places*, and in both arms. The progress of the pock was exactly the same. On the right arm there is now a circular wound, the shape and size of a large split pea, which is granulating, gives pus, and has dressings applied. On the left arm the pustule is also circular, and somewhat larger, covered with a blackish brown incrustation, and elevated above the surface of the arm as usual, with a desquamation of cuticle around the edge.

Hannah Baker, aged about 37, was inoculated, by seven or eight punctures, from James Hall, October 31. She was very ill for three days, and much indisposed for three weeks. Her arm was supported by a sling for nine or ten days; and poultices were applied†.

Elizabeth Skinner, aged three years, was inoculated from James Hall. The inflammation extended to the shoulder; the arm was in a very bad state for five weeks, and the child has been ill ever since. It now appears somewhat

* Mr. B. denies this assertion. See his account at p. 282.

† The vulgarity and absurdity of this woman's behaviour prevented my asking further particulars, as they could not have been depended upon.

similar to the marks on William Hall, and has dressings applied. The other arm was inoculated also.

William Skinner, nine weeks old, and brother to Elizabeth, was inoculated the same day with William Hall, viz. October 31st. He has been ill ever since, and continues so now. Dressings have been applied to his arm.

The parents of these children, and also Hannah Baker, are much prejudiced, full of invective, and refuse to converse reasonably.

After having proceeded thus far in my inquiry, Mr. Buckland came, and politely directed my attention to the remaining severe cases that had not been noticed, viz.

James Swinton, 18 weeks old, was inoculated in both arms, November 7th;—in the left arm in two places. The incrustation on the left arm is now of a dark reddish brown, with a desquamating and raised edge. The right arm mark is now of a light brownish colour, and flat. This child had some little eruptive fever: the left arm swelled, inflamed, and had blisters for fourteen days; beginning on the Thursday after the inoculation. It has now subsided much, but the child is labouring under violent catarrh, and disposition to pulmonary inflammation. The right hand and arm are also swelled, and are much larger than the other, “though nothing to what they have been.” Mr. B. prevented the extension of inflammation and œdema here, by the application of oatmeal and vinegar poultices.

Susannah Washington, aged 35 years, has a large, irregular oval wound, at this time, with high edges of a livid colour, on the right arm. She was inoculated from the children of Taplin, living in the same alley*.

Maria

* The three children of Taplin (Thomas, aged six years; William, aged four years; and John, aged two years) were inoculated. William was ill from the first inoculation; the two others were not so, till, it is said,

Maria Washington, eight years old, daughter of the above, was also inoculated from Taplin's children. She has a circular mark of the size of a large split pea, which is now dry.

James Cuthbert, aged four years, and *John Cuthbert*, aged a year and a half, have more of the vaccine character in their pustules than any of the other patients, who are indeed totally devoid of it. That of John has a white margin which appears scurfy.

Having thus satisfied myself from the above accounts, collected from the worst cases, and the ready communications of Mr. B. it was sufficiently obvious that *the vaccine disease was not any way implicated in the consequences that had been produced*; the real cause of which, had occasioned so much conjecture. It was very evident that neither the use of one lancet, nor the matter being inserted in a puriform state, could have been adequate to such dreadful consequences, as must only have arisen from improper or contaminated matter being introduced into the habit.

After having stated this to Mr. B. he informed me, that this had been the opinion of those gentlemen who came from town to see the cases. (See *Postscript by the Editors*, p. 287.)

Having been publicly called upon to give the above statement, in the Physical and in the London Medical Societies, and some of the particulars relating to Mr. B. having been variously related by others at those times, I availed myself of his obliging offer to have another interview with him upon the subject. Having done this, December 11th instant, I received the following statement, which, added to the foregoing, as its only proper counterpart, must prove equally acceptable, as the only way to ascertain the truth of cases so much and so generally agitated.

said, "the heads of the pustules were removed by Mr. B." Thomas was inoculated twice: first with James Hall, and fourteen days afterwards, as stated p. 277. Several other patients were very ill.

“ Mr. Buckland inoculated eighteen patients, in Thunderbolt Alley, with vaccine virus, taken from the child of ——— Hibbert, Esq. and when a very slight incrustation, if any, had formed. The virus not being very thick. Only three of these succeeded, and they did well. About fourteen days afterwards, the remaining fifteen were again inoculated with matter taken from the children of Hall and Skinner, (see p. 277 & seq.) ‘ about the ninth day†’ of each, upon one lancet. On these children so inoculated with the mixed matter, all those bad effects were produced that have been noticed: the mischief in the second inoculation appearing to arise from this matter of both, being mixed on the lancet.

“ Seven other children were inoculated from the child of ——— Hibbert, Esq. all of whom did well, or were supposed to do so, as no account of the contrary has been received.

“ Mr. Hibbert’s child was inoculated with vaccine virus supplied by Mr. Langley of Broad Street, who attends the family in town, and did well.

“ Mr. B. attributes all the bad consequences to the ill state of constitution existing now and heretofore, in the respective parents of those children from whom he took the matter for the second inoculation.

“ Not more than three or four punctures were made in any arm, excepting that of Hannah Baker, where seven or eight (but not more) were made, and that at her own particular desire, to prevent a second failure.

“ No scab had formed on the arm of James Hall when the matter was taken. See p. 277.

“ Mr. B. had both read and seen cases of cow-pock in various situations, in his own neighbourhood, in town, &c.”‡

† This agrees with the account by Mrs. Hall, at p. 277, which corroborates the above, and proves from this circumstance, that it was before any incrustation had formed, or could form; unless the head had been scratched off, in which case it would not have been the crust here meant.

‡ This is necessary to be mentioned, as the contrary had been asserted.

This

This statement of Mr. Buckland perfectly agreed with what he had before delivered §.

After leaving Mr. B. I visited the children again, having so good an opportunity, and found them all well, except Swinton's child, who had still some slight remains of his catarrh †. There are large marks remaining of a deep blue colour, softening off into a red, as if leaving the centre, where it is drawn into seams like a scrofulous cicatrix. The size of these marks varies much, some being larger than a crown-piece, and immediately to a much smaller extent.

Mr. B. further stated, "that the practitioners among whom the parish was divided for inoculation, were Messrs. Prior, Gardiner, Bancroft, and himself. All their patients did well. That the first gentleman was averse to the proposal, from the expectation of that undeserved abuse which the poor seldom fail to bestow if aught unexpected occurs, and tracing every after-evil to that source; but that Mr. B. had urged the propriety of adopting the method proposed for the gratuitous inoculation of the poor *."

Mr. B. also "pledged himself to answer any inquiries from any person, (whether of the medical profession or not,) and that he was ready to appear before any society or body of men for that purpose, so free was his mind from any imputation of wilful error." He said, he could not charge the consequences upon any other cause than "the mixture of the matters; and, even then, from the habits of those from whom it was taken."

Mr. B. had also "been informed by several medical gentle-

§ It was also said in public, that "he never gave the same account twice."

† I saw this child again on Monday last, the 15th instant; when he was recovered, and able to go out.

* This remark is added, because Mr. Buckland has been accused, even in a public Society, of having been always "an avowed enemy to cow-pock inoculation, and that he wished to injure it."

men, that the letter about his cases in the Med. Journal was entirely unintelligible to them." Most medical men, I believe, think the same, as must evidently appear on perusal.

A regard to truth and justice obliges me to declare, that the greatest possible candour is exercised by Mr. B.; and, although I never had the pleasure of seeing him before the times above mentioned, I consider myself very highly obliged by the polite and attentive behaviour with which he honoured me, and the detail I have thereby been enabled to lay before the public, with his permission and by his authority.

As to the cause of this misfortune, it is very certain that the use of one lancet in a series of inoculations, or the insertion of matter in a puriform state, is not adequate to the production of such effects, as my own experience warrants me in asserting†. Nor will the forcible removal of an incrustation produce them, as this circumstance often occurs with children. If, therefore, the lancet was perfectly clean before its introduction into the pustule, the real cause must yet be doubtful. As to the mixing of matter being the cause, from any contamination in the parents' habits, it would equally militate against all inoculation; for as the drawing of blood cannot always be prevented, it would go to prove, that any temporary or permanent constitutional affection might also be communicated with a cutaneous disease. If so, the matter must here be supposed to have undergone some decomposition or loss of its original properties; and thus to have communicated an

† I have frequently employed only one lancet for many patients; and that, both to take and insert the vaccine virus: and have also used the virus in every state, from the most limpid to the consistence of butter, and when taken even after an incrustation had begun to form. Yet in every case the event was equally characteristic and favourable. Dr. G. Pearson, I understand, asserted the same to Mr. B. but advised the puncture not to be made too deep; which, I believe, is generally allowed and observed, to avoid the cellular membrane.

eruptive disease, *sui generis* §, or similar to what the first communication from the cow or horse has been known to do.

A review of the whole will now evince the *erroneous* statement given in the Med. Journal. For it appears that, instead of fifteen, eighteen were inoculated; and instead of six, only three were infected: that the remainder were consequently not nine, but fifteen. Mr. B. also positively affirms, the matter was not taken at a late period, or when “any scab” was formed, but, on the contrary, on the ninth day, as both his and the patients’ account testify; and when, therefore, instead of “tearing off the scab to take some sort of matter,” (as has been publicly, but surely unjustly, because falsely said,) no scab whatever could have formed. Also, the matter thus taken was mixed with the other matter that was also taken at the same time, to inoculate the other children, who all lived in the same alley. So that what the Journal calls “the fresh cow-pock fluid,” could be no other than what the letter before asserted to have been taken “at a very late period of the disease, after a brown scab had formed, and which had a purulent appearance,” (this surely is not very fluid,) “at the time it was taken from the arm:” consequently, therefore, the account given by the letter is a very improper and erroneous one. For if the letter is designed to state that the matter for the first inoculation was taken late, it should have been remembered, that those patients were so far from experiencing the ill consequences there mentioned, that they were the only ones who had the disease without any unfavourable symptom.

The directions which are added, are such as militate against the statement and for Mr. B. since the matter taken, was not later

§ It has happened with variolous matter when kept too long or too hot; as was the case with a practitioner in Bedfordshire, whose patients afterwards caught the natural small-pock, of which some died. This lessens the number of cases where the small-pock has been said to occur twice; and where, perhaps, it very often occurs, that the first disease has been chicken-pock.

than

than the ninth day; see p. 282; and that the fluid should be transparent, is not necessary. The letter, therefore, is evidently both imperfect and unintelligible; and cannot be called, as it is by Dr. Lettsom, an “accurate statement”—which, as he had “seen” the patients, must have appeared: “and from inspecting the whole history of the cases,” he could not have understood the matter to have been taken from “a dried pustule of the cow-pock;” as those cases, so inoculated, had not any untoward symptom, but only the secondary ones, from the mixed matter and opening the pustules: for of the first, I believe, no room to doubt was left.

It is perhaps unnecessary, but in justice, to add, that when Mr. B. was informed of the indelicate and slanderous reports of those who, for want of information, could not judge of the cases, he exclaimed, “*They are base lies!*” As I can have no other motive for the above recital, than the investigation of truth, in a matter of such public concern as the vaccine inoculation confessedly is, I have only to request forgiveness for the prolixity with which it has been detailed; and which, perhaps, only the nature and present circumstances of the case would excuse. Requesting, therefore, that the cow-pock may not be blamed for this unfortunate affair, and that no credence may be given to any of those idle tales which have been both industriously and maliciously propagated to retard its progress, I have to apologize for the hasty arrangement of these particulars, and their late transmission for your insertion, which I could not request but under the present agitated state of the question—as to matters of fact. Sincerely hoping that every unfair opposition may be fairly overcome, and wishing all possible success to what may justly be called *the vaccine preventive*,

I have the honour to be,

Rockingham Row,

Gentlemen,

Newington Butts,

Your obliged servant,

Dec. 16, 1800.

CHARLES PEARS.

N. B.

N. B. As the chief object of my endeavours is to ascertain the truth, I shall be happy to answer any inquiries it may be in my power to resolve.

Postscript by the Editors.

As some of our readers may probably be unacquainted with the statement printed in the twenty-second number of the Journal, to which Mr. Pears has repeatedly alluded, we here subjoin a copy of the letter or testimonial referred to.

“ Having been informed, that in an inoculation of the poor of a parish in the neighbourhood of town for the vaccine disease, symptoms had occurred very much unlike those we have ever seen or heard of in the cow-pox, and that one of them had actually died under the disease, we have been induced to visit them; and we now feel it incumbent on us, as a duty to the public, and in justice to Dr. Jenner, to make the following statement, as the result of our inquiries.

“ The poor had been divided into four districts, to be inoculated by four different medical gentlemen resident in that parish. The patients of three of these gentlemen had the cow-pox in the regular manner, without one unfavourable symptom.

“ In the remaining district it was observed, that of fifteen persons inoculated on the 22d of October, only six took the infection.

“ There is every reason to think that this first inoculation caused no appearances in any degree deviating from the usual progress of the cow-pox.

“ The remaining nine were inoculated again on the 31st of October.

“ The gentleman who performed this inoculation candidly acknowledges, that the matter with which he had charged the lancet for this purpose had been taken at a very late period of the disease, after a brown scab had formed, and had a purulent appearance at the time it was taken from the arm; consequently

quently had, by degenerating, lost the power of giving the cow-pox infection, and appears to have been the cause of all the mischief that ensued.

“ It is proper, however, to remark, that the matter thus taken was not alone trusted to in the dry state ; but that, in order to ensure success, fresh cow-pox fluid was also taken upon the same lancet from the arms of different children before inoculated.

“ The symptoms produced by this inoculation were extensive erysipelas, spreading rapidly from the part inoculated, accompanied in many instances by considerable constitutional affection, followed in most by an immediate ulcerative process, and in some even a tendency to gangrene.

“ In confirmation of the opinion, that an infection was thus propagated, distinct from that of the cow-pox*, we are also under the necessity of stating, that in two of the patients who are believed to have had the cow-pox distinctly by the former inoculation, the same symptoms were unfortunately induced, in attempting to procure cow-pox fluid from them with the same lancet.

“ We have, however, the satisfaction of adding, though several remain indisposed, that all are in a fair way of recovery.

“ WM. H. WOLLASTON, M.D.

“ JOHN PEARSON,

“ JOHN GRIFFITHS,

“ RICHARD CROFT.

London,

November 20, 1800.

“ *P. S.* For the information of the public, and as a caution to those who may need to be reminded of the injunctions

* See Dr. Lettsom's Note, p. 567.—In the letter to Dr. Bradley, his friend Dr. Lettsom expresses himself as of the same opinion with those gentlemen who signed this statement ; viz. “ *That the disease was not the cow pock, but morbid ulceration, originating from the purulent matter formed under the scab or dried pustule of the cow-pock, with which the patients were infected.*”

already given by Dr. Jenner, it is thought advisable to repeat, as concisely as may be, the directions which may be collected from his various publications on this subject.

“ 1. The cow-pox fluid should be taken not later than the ninth day of the disease.

“ 2. The fluid should be perfectly transparent, as it is not to be depended upon if it has become in any degree opaque.

“ 3. The fluid, if not used immediately, should be allowed to dry gradually and thoroughly before it is laid by for future use.

“ 4. The punctures can scarcely be made too superficial, and on no account should more than one be made in each arm.

“ 5. Attention should be paid to repress, as soon as may be, any excess of inflammation that may happen to arise.”

Art. 12. *Facts concerning the Eruptions and contagious Nature of the Cow-pock.* By Mr. HARRUP, of Chobham.

To the Editors of the London Medical Review and Magazine.

GENTLEMEN,

AS it is from experience alone that the merits of vaccine inoculation can be ascertained, it is the duty of every one who engages in the practice to give a faithful account to the public of whatever phenomena may occur, which have not been before taken notice of. I have too high an opinion of the integrity and candour of the principal favourers of this inoculation, to suppose that any thing has been either concealed, or wilfully misrepresented; but it is not impossible that their judgment may have been biassed, from the great advantages apparently attending it. Ingenuity has been put to the rack to trace the sources of unfavourable cases to the contagion of the small-pox, which it is now more than probable originated in the disease itself. The following facts cannot be too generally known; it is therefore hoped you will have the goodness

to insert them in the next Number of your widely-diffused Review and Magazine.

Having found some difficulty, in a former inoculation, of communicating the disease with matter not recently taken, I procured a young man to be sent to me who was inoculated with vaccine matter. [Mr. Harrup should have informed us from whence *this matter* was originally received. EDIT.] When he arrived the disease was rather on the decline, of the mildest form, and attended with no eruption whatever.

A small quantity of colourless fluid was taken from the inoculation pustule on the point of a *clean* lancet*, with which Mary Loveland, about 15 years of age, an under-servant in the house, was immediately inoculated, October 6, 1800. No unusual symptoms took place. She complained, from the sixth to the ninth or tenth day, of stiffness of the arm, and some degree of soreness of the axilla, and of slight febrile symptoms. In short, the disease was extremely mild, no sort of eruption, and during the whole time she continued her work as usual. On the ninth day the following persons were inoculated with a colourless fluid taken from her arm, viz. *Jacob Gordon*, a young man, formerly much afflicted with scrofula; *Trye*, a child; *Smith*, a child; *James Trigg*, upwards of 40 years of age, a farmer; and his *Son*, a boy about 8 years old. The punctures inflamed very soon; even some degree of inflammation was perceived next day, and which continued to increase. On the eighth and ninth days, they had all some slight febrile symptoms; the vesicles on their arms were flat, and contained a small quantity of limpid fluid, with surrounding inflammation. They complained of stiffness of the arm and axilla. The tenth day Gordon and Trye had an increase of the febrile symptoms; and there appeared on each of them a number of small pimples very much resembling the variolous

* It may be necessary to observe, once for all, that the same lancet was used in every case, and that it had never before been employed for the purposes of inoculation.

eruption, attended with considerable itching. The eruption continued about four days before completed, during which time they were feverish, and Gordon complained much of his throat and tongue. In an hour or two from the first appearance of any of these pimples, a small watery vesicle could be perceived on the top, and in about three days they were the size of large small-pox, quite distinct, with an inflamed basis. When opened, they contained a watery fluid. On the third day, those which first appeared became depressed, with a black speck in the centre. Gordon had, in all, about seventy or eighty. The number on Trye could not be ascertained, on account of his having scratched them on his face and hands. I did not see Smith after the eruption took place; but by his father's account he had several about his head, which appeared on the ninth and tenth days. Trigg's son had two on his face, and twelve or thirteen around the inoculation pustule; no fever. Trigg continued at his work as usual, but not without complaint. On the evening of the twelfth day I examined his arm: the inoculation pustule, which was of a circular form, might be about an inch in diameter; the centre depressed, of a whitish colour, somewhat inclining to blue, with an inflamed basis: his only complaint then was lassitude; an hour or two after, he was seized with giddiness and fever: fancying he had caught cold, he ate a mess of bread and beer boiled, and next morning the eruption appeared. When I visited him, three days afterwards, he had every appearance, at first sight, of a person in the small-pox; the pustules were very large and distinct, and contained a limpid fluid, which gave them a whitish appearance; the inoculation pustule had not increased in breadth, but the circumference was turgid, and stood higher, while the centre continued depressed: he might have, in all, about three hundred; complained much of his throat, and a heat all over his head, which might arise from the great number dispersed over the hairy scalp. No fever at this time, nor afterwards. The fifth day from the

commencement of the eruption, the pustules acquired a yellowish colour, and soon afterwards became brown scabs, which fell off in a short time. The disease in Gordon assumed much the same appearance throughout as in Trigg, and it ought to have been mentioned before, that the pustule on the arm was nearly similar.

Twenty-five persons in all were inoculated, twenty-one of whom had pustules, some only one or two, and none had above thirty, excepting those whose cases have been already related: the scabs were of a brown colour, prominent, and very hard. In every instance a small watery vesicle was seen on the top of each pimple, two or three hours after its first appearance. In general, a few pustules continued to come out, particularly on the face and hands, for several days, when the others were entirely changed into scabs; but without any febrile symptoms, or other complaint. No preparatory medicines were used, nor any particular regimen enjoined. Small doses of the pulvis antimonialis taken twice a day checked the fever, and consequently the eruption, in all those with whom it was tried.

I had never entertained any suspicion that the disease was contagious, having considered the many proofs published from time to time on the subject as conclusive: how much I was deceived, the following cases will sufficiently shew. With the view of preserving the matter recent as long as possible, I had only inoculated one or two of a family at a time: it was with much astonishment I was informed one morning by Richard Smith, (the father of one of the children mentioned above,) that he was sure his son James had caught the infection from his brothers and sisters.

This boy, about 8 years old, had been seven weeks before seized with febrile symptoms, which, after a few days continuance, disappeared: but from that time he laboured under a total loss of memory; had a voracious appetite till two days before, when he was attacked with fever, which went off as
the

the eruption appeared. When I visited him, the pustules were much the same as those already described, numerous, and regularly dispersed over every part. On the sixth day they began to change their appearance, and he soon recovered. His former complaints left him after the eruption was completed, and have not since returned.

An infant in the same house, which had not been inoculated, also caught the infection; and had numerous pustules, but soon recovered.

Some time after Trigg's recovery, his wife, not 30 years of age, her child, about 15 months old, and Carman, a young man, servant in the house, the only persons who had neither been inoculated, nor had had the small-pox, were all seized about the same time with febrile symptoms. The child soon recovered, and nothing particular occurred, but what has been already related in the other cases. Mrs. Trigg complained of violent pain of the head, had fever in a very high degree, great prostration of strength, and could not be raised from the pillow without fainting and sickness. She continued in this state four days before the eruption appeared, which was first on the arms. The eruption was completed on the morning of the fourth day from its first appearance, and confined chiefly to the face and arms. The pustules seemed confluent, but towards the height of the disease became distinct. At the beginning the smallest doses of the pulvis antimonialis produced violent vomiting and diarrhoea; equal parts of aq. ammon. acetat. and mistur. camphor. with gr^{ss} xl of tinct. opii in ℥ viii of the mixture, two table-spoonfuls taken every four hours, greatly relieved the symptoms. Her diet consisted entirely of strong mutton broth, and port wine and water. The bowels were kept regular by clysters.

The disease in Carman, in external appearance, resembled the confluent small-pox; the eruption chiefly confined to the head and arms; delirium not frequent; a voracious appetite throughout the disease; and while the swelling of the eyelids did

not prevent his sight, he frequently dressed himself and walked down stairs. Regimen and medicines the same as for the last-mentioned patient. They both narrowly escaped with life.

Since that time Joseph Slut, upwards of 70 years old, caught the infection by living in the workhouse where several children were inoculated. He had numerous pustules over his body; but upon the whole the disease was mild. His brother, a year or two older, was attacked with all the symptoms of the disorder, which went off by taking a bolus composed of two grains of calomel, half a grain of opium, and a small quantity of conserv. cynosbat.

Mrs. Smith, about 80 years old, grandmother to the children of that name already mentioned, was also attacked with violent febrile symptoms. When I first saw her, the eruption was making rapid progress; but was soon checked by the exhibition of a bolus similar to that taken by Slut, and repeated sixteen hours after. She is now convalescent.

No secondary fever came on in any of the above-mentioned cases. It may be necessary to remark, that the small-pox was not in the neighbourhood.

I am, Gentlemen,

Your most obedient humble servant,

Chobham, Dec. 9, 1800.

ROBERT HARRUP.

Art. 13. *Part of a Letter from M. GIRTANNER to M. VAN MONS, dated Göttingen, January 26, 1800.*

On the Efficacy of oxidating Substances, and particularly on the Oxide of Arsenic in certain Disorders.

SINCE I have discovered that oxygen cured venereal disorders, that is, for the last twelve years, says the author, I have made a great number of experiments on that subject, and this is the result of my inquiries: When the disorder is not inveterate, and that the first degree of oxidation only is necessary

I have

I have made use of the citric acid ; for the second degree, of the oxalic acid reduced ; and for the third degree, and in general for the most inveterate disorders, a dissolution of the oxide of arsenic. I know nothing more efficacious for venereal disorders, complaints of the liver, obstructions of the belly, or for a dropsy, &c.: but the case must be such, that the lungs are not affected ; if they are, the sick man will soon perish. I mix four or five drops of a solution saturated with oxide of arsenic, (in nitric acid,) with two pints of water, and I cause them to take this portion in two days. This remedy has wrought wonders ! There is not any thing more efficacious in intermitting fevers. If the patient begins to cough, the remedy must be withheld ; for a dry cough is a proof that the body begins to be too much oxygenated : if the cough continues, it may be conquered in a short time by the use of liver of sulphur. I now mention to you an experiment which I have repeated an hundred times.

Art. 14. *A Case of complete Excision of the Uterus terminating favourably.* Communicated by Dr. HOOPER to Mr. BLAIR, and by him to the Editors.

DEAR SIR,

IN the first volume of a work of the celebrated Professor Wrisberg, entitled " *Commentationes medici, physiologici, anatomici,*" &c. lately transmitted to me from the continent, is a very singular and interesting case, of the complete resection of the uterus, without any fatal consequence. I have been at the trouble of translating the most material passages ; and should you, on perusal, deem the fact sufficiently important to merit a place in the Medical Review and Magazine, I will trouble you to communicate it to the Editors.

From your sincere friend,

St. Mary-le-Bone Infirmary,

R. HOOPER.

Dec. 14, 1800.

ON

ON the 7th of June 1780, at eight o'clock in the evening, Surgeon Hesse came to request Dr. Wrisberg's advice concerning a countrywoman, by the name of Maria Dorothy Ude, born at Schmidt, to whom he had been called the same day. He related, that Anna Catharine Rippel, the midwife of the place, after having delivered the woman of a live girl, had cut away with the placenta a large fleshy mass, (which he brought with him, and gave to Dr. Wrisberg.) The Professor, upon examination, found it was the uterus, and imagined that the midwife, by her improper treatment of the placenta, which he supposed adhered firmly to the uterus, had caused an inversion; and that, when inverted and hanging down from the vagina, she had cut it away.

The case being of so uncommon a nature, Dr. Wrisberg was induced to collect every circumstance respecting it. Upon making inquiry, he learnt that the unfortunate woman was 24 years old; was delivered of her first child on the 5th of June 1780, between two and three o'clock in the afternoon, without any particular symptoms; that after the child was separated from the funis, and put into bed, the midwife attended to the after-birth, and was particularly anxious about loosening and extracting it; that she used so much effort, repeated it so often, and distressed the woman so much, by frequently introducing her arm, that she fainted away, and was only able to pronounce, "O ihr resist mir ja alles aus dem leibe," that is, "You are tearing out all my bowels."

About this time the poor woman recollected that she felt a large mass hanging down from the sinus pudendorum; and she only remembers, that she was in such agonizing pain, that she cried out vociferously. It was during this period, no doubt, that the midwife cut away the inverted uterus hanging from the genitals, threw it into a bason, and shortly afterwards buried it.

The unfortunate woman lay from that moment, on the 5th of June, to the 7th, without any medical assistance, either to

stop the hæmorrhage, or support her strength. The quantity of blood which followed the amputation was immense: she lay, as it was described, for dead, *sub deliquio animi profundo*; till at length it spontaneously ceased, and on the 7th of June recovering from her swoon, with a very weak voice she requested that Surgeon Hesse might be sent for.

When he came, at two o'clock in the afternoon of the 7th, he directed that the fleshy mass, which he was told had been buried, might be dug up; and, as related above, he conveyed it to Dr. Wrisberg, requesting his attendance in this desperate case.

At eight o'clock in the evening Dr. Wrisberg visited her. His relation of the case is truly deplorable: I found her, says the experienced Professor, without the least colour in her face, perfectly like a dead woman; her extremities, forehead, nose, ears, hands, feet, and every part, cold to the touch; her countenance deadly; the eyes turbid and torvous; her speech very weak, and hardly perceptible; scarcely any pulse to be felt, except in the larger arteries; respiration short and small, with very little motion of the thorax. I understood, (he adds,) she had taken no food of any kind, and that her stools and urine came away involuntarily. In this sad situation, not the smallest hopes of recovery could be entertained by the Professor; he, however, directed his attention to prevent the return of the hæmorrhage, and restrain the vehemence of the fever which would ensue, by cataplasms, and the use of the vitriolic acid. He then waited with anxiety to see the result.

On the 8th of June Dr. Wrisberg found his patient a little better, and her strength increased by the use of the dulcified mineral acid; the countenance, appearance of the eyes, state of the mind, and vital powers, all seemed to favour the hopes of recovery. Although the face, and the whole of the skin, was of a disagreeable pale, and, as it were, œdematous colour, yet the increase of her strength was remarkable, and the recollection of every thing perfect. Her pulse, although weak, was improved in vigour; her respiration, before scarcely perceptible, now became more evident. A gentle heat had

taken place over the body, which greatly pleased the Professor; but the stools and urine still came away involuntarily. The smell in the room, and near the patient, was extremely fetid and offensive; the skin for the most part dry, but here and there, on the forehead and cheeks, a cold sweat was perceived.

The appearances of the abdomen, genitals, and pelvis, were as follow: 1. The abdomen was wonderfully collapsed, especially in the hypogastric region. 2. The vagina was filled with matter of a somewhat soft consistence, composed of mucus, pus, and some blood. Upon removing it, and extending the finger higher up, Dr. Wrisberg came to an evident hiatus, opening towards the abdomen. This hiatus was almost closed by a large, soft, voluminous body, which was the urinary bladder distended with urine. Upon removing the water with a catheter, the access was easier. The posterior part of the rectum was then detected, filled with hardened fæces; and a soft, lubricant body, which Dr. Wrisberg supposed was the gyrated intestine, presented itself to the finger. The Professor remarks, that great caution was necessary to be observed, lest, by a foolish curiosity in carrying the finger higher up, he should impede nature, now occupied in narrowing the opening; or, by irritating the contracting vessels, cause a return of the hæmorrhage. Nevertheless, he wished to know what effect respiration would have in removing and depressing the intestines towards the hiatus; he therefore directed the patient to remain as long as she could in a state of expiration, when he perceived the lubricant body receded from the opening, and gradually again relapsed on the following inspiration. The vagina, he observed, became narrower towards the hiatus, contracting like a funnel. The size of the opening was about the diameter of one's finger. The matter flowing from the vagina diffused an unpleasant, putrid odour, somewhat gangrenous. The breasts were flaccid, almost dry.

From this examination it appeared, that nature was diligently employed in closing the hiatus, and that there were no apprehensions to be entertained of any return of hæmorrhage;

Dr.

Dr. Wrisberg, therefore, directed his attention to three indications, viz. 1. To keep the body and the mind as quiet as possible, for fear of a prolapsus of the intestines; to prevent which, a wet sponge was introduced into the vagina. 2. To remove the impurities of the secretions coming from the wounded parts by proper injections. 3. To prevent fever by antiphlogistic and antigangrenous medicines, which, in this case, was effected by mineral acids.

This method of cure was persisted in by the Doctor, who, on the 5th of June, was pleased to see his patient walking about her room.

On the 27th she desisted from the use of the decoction of bark with acids, which she had hitherto taken; in the place of which was substituted milk whey.

On the 4th of July Dr. Wrisberg again visited his patient, now almost recovered, and upon examination found the following state of the parts: A whitish mucus of no particular smell flowed from the genitals. The breasts were perfectly dry. The opening into the hiatus was become narrower, but not yet closed; it appeared to be changed into two orifices, separated by an intervening lacinia, each of which admitted the apex of the finger. The soft and lubricant body could no longer be distinguished. The fæces and urine were excreted without inconvenience, unless that she now and then complained of something having fallen down into the vagina, when she strained to eliminate hardened fæces.

At the beginning of September this poor creature was able to walk to Professor Wrisberg's. The hiatus was not yet perfectly closed, yet it was more narrowed and consolidated; it appeared disposed to form some lesser openings. She related, that she felt a singular sensation of cold at the bottom of the belly from the least wind, as if the air had penetrated into the lower part of her belly through the vagina. Her strength was rapidly improving.

On the 12th of December Dr. Wrisberg again examined

her. There had been no appearances of the catamenia; she often felt a shooting pain at the bottom of the belly; four distinct apertures were distinguished at the end of the vagina with hardened edges; one of these openings was near the urinary bladder, another a little farther removed, the third higher up, and the fourth lay behind. In other respects all the parts towards the abdomen were soft.

As the poor woman, after her recovery, had frequent occasion to go to Göttingen to sell her goods, the Professor had an opportunity of seeing her from time to time.

On the 16th of October 1784 the following changes were noticed: 1. She kept her health pretty well; but was of a chlorotic appearance. 2. Her stools and urine continued as usual, with the same inconvenience as related above. She declared, that she sometimes could feel her bowels descend, and that she had touched them. 3. The same circumstance took place upon any particular exertion. When lying in bed, she perceived an emptiness in the lower part of her belly, as if something were wanting. 5. She observed no appearances of her menses. If she laboured under obstructions, in squeezing she found some little blood discharged with the excrement; but for the most part she had a discharge of a milky mucus. 6. After the return of her husband from the American war, she cohabited with him; but declared that she no longer experienced that sense of pleasure she formerly did. 7. Upon a cautious examination, with all possible attention, Dr. Wrisberg observed the hiatus of the vagina, which, on a former year, was of an irregular figure, was now contracted into a round foramen of the diameter of only five lines: he could put the tip of his fore finger into a cavity of the size of a filbert; but this aperture was almost closed on the 1st of September 1786.

From the above history, this celebrated physician makes the following observations:

1. That although we have many instances of the extirpation

tion of the uterus, without being attended by fatal consequences, yet we have no example, at least not so memorable a one, where the uterus was cut off immediately after delivery, where the blood-vessels are so large as to equal the largest vessels, and their resection not cause a fatal hæmorrhage.

2. In this instance we have a striking testimony of the beneficent and healing powers of nature, as well as of the efficacy of remedies administered by art; for, from this horrid operation, the poor creature was exposed to two chances of life, viz. to die in a short time from hæmorrhage, or more slowly from gangrene, corruption, and sphacelus.

3. The consolidation may be looked for partly in the contraction of the margins of the vagina, separated from the lower segment of the uterus; partly in new-formed cellular texture, which successively closed up the larger spaces of the hiatus, and rendered it firmer, in proportion as its substance became more solid. The Doctor suggests the wish, that if this woman should die before him, he might have an opportunity of opening her, to inquire into the nature of the obstruction; but, from her age, and the place of her abode, he has small hopes to indulge.

4. The indifference she expressed on the commerce of the sexes is a singular phenomenon, as it certainly was the consequence of the abscision of her uterus. It is a well-known fact, that castration in other animals, which, for the most part, deprives them of their ovaries, may account for such indifference; but that the privation of the uterus should be the cause of such indifference towards a concern of the greatest moment, remains amongst those things of which we have no knowledge. Perhaps it may afford a hint for a new operation in the discovering and multiplying of which our age is celebrated; viz. the extirpation of the uterus, to cure the deplorable disease of females, erotomania and furor uterinus.

5. May it be allowed me, in the last place, says the author, only to add a thought, whether (as the uterus, which possesses the

the largest vessels, has been cut away without death being infallibly the consequence,) under proper precautions, its extirpation may not be undertaken in that state, when its vessels do not contain so much blood; *i. e.* extra graviditatem, that so by its removal, in cases of scirrhus uterus, or when they tend to cancer, we may expel that most truculent genus of disease the open cancer.

The State of the Uterus when cut away.

The uterus was cut away exactly at that part where it coheres with the vagina. The incision was made rather towards the uterus than vagina, yet in such a manner, that not only a small part of the inferior segment remained adhering to the vagina; but the uterus appeared cut and divided for the space of four inches.

The Fallopian tube, on each side, was cut through in the middle, in such a manner, that in the preparation those parts only of the tubes are seen which enter the uterus; but the remaining portion of the tube, and the ovarium of one side, are left adhering.

The right ovarium contained twenty-nine vesicles of different sizes, of which the greater number exceeded a pea.

No vestige of corpus luteum was to be seen in this ovarium; it is evident, therefore, that the other enclosed the corpus luteum, the sequela of the conception of one foetus.

Art. 15. *Medical Reminiscences concerning the Use of Digitalis in Consumption, &c.* By a CORRESPONDENT.

To the Editors of the London Medical Review and Magazine.

GENTLEMEN,

TO the community at large it is certainly of very little consequence, whether a medical practitioner brings forward a new remedy, or revives an old one, provided he devises something to assuage the miseries of suffering humanity. It must, however,

ever, derogate somewhat from the pride of invention, as well as detract from the reputation for general information which every physician is at least desirous of being thought to possess, when we find an article of the materia medica ushered into the world with the imposing air of a discovery, the virtues of which appear to have been acknowledged, at least believed, a century ago, as fully and fairly as at present.

These reflections are suggested by perusing the self-gratulations of a physician, who seems to think himself entitled to the universal gratitude of mankind, for having acquainted them with the use of digitalis as a remedy in pulmonary consumption. The power of the remedy I do not mean to dispute, but sincerely wish that it may be as permanently efficacious in checking that dreadful malady as he seems to expect. After perusing the following quotation, let any one judge what pretensions he has to be considered as a discoverer.

“ Consumption cured by Fox-glove.

“ But the specific which transcends all the medicines for a consumption here mentioned, and many others besides, is the herb fox-glove. A weak decoction of the herb in water, or in wine, or in half water, half wine, may be drank as ordinary drink; and of the juice of the herb and flowers may be made a robe or syrup with honey, which being taken three spoonfuls at a time; first in the morning fasting; secondly at ten in the morning; thirdly at four in the afternoon; and lastly, at going to bed, will restore (where the patient is not past cure) beyond all expectation. It cures a phthisic or ulcer of the lungs when all other medicines have failed, and the sick esteemed past cure; but it is a very strong medicament, and emetic withal, so it ought to be given with discretion, not to transcend the strength of the patient, for then, instead of doing good, it may do hurt; and therefore the syrup ought to be taken at first in a lesser dose, and to be increased as you see cause. It opens the breast and lungs, frees them from tough phlegm, and cleanses the ulcer and heals it, when all other remedies

act

act without effect. I have known it do wonders, and speak here from a long experience. Persons in deep consumptions, and given over by all physicians, have, by the use of this herb, been strangely recovered, and so perfectly as to grow fat again. I commend it as a secret, and it ought to be kept as a treasure. These few lines concerning this matter alone, are worth ten times the price of the whole book, were there nothing else in it besides that one had occasion for. I am very confident of it, the deplorable wasted patients, who have been in long and tedious consumptions, phthises, or hectic, if they will make use of it, will give me thanks for this notice, whilst they may have reason enough to curse the memories of the quacking bloodsuckers, who, as they have drained them of a good part of their estates, would, by a continuance under their hands, (for all their specious methods of cure,) have fooled them out of their lives too."

This is copied literally from a work of W. Salmon, dated 1710, posterior, I believe, to his Herbal, where it is printed in italics, as a passage peculiarly worth attention. To me, I confess, it appears clearly to be the result of experience, as he seems to have been acquainted with its nauseating properties, gives the very same cautions respecting its use as are given now, and speaks with no less confidence respecting its curing consumptions than Dr. Beddoes himself. And after this are we to look upon a cotemporary as the discoverer of this remedy? I am rather inclined to suppose, that the syrup is the best preparation of the plant; (query, Is this Godbold's syrup?) but even the tincture, which is now the fashionable preparation, is mentioned as "powerfully opening obstructions, and performing other things," in the Druggist's Shop opened, Book X. Chap. IV. of the same author. In another part of the work first quoted, we are informed, that an ointment made with fox-glove is an excellent remedy for scrofulous sores. Its external use is supported by a very ancient Italian proverb, "*Arralda tutta piage scalda—digitalis sanat omnia vulnera.*"

Independently of any personal allusion, it appears to me that if men would read more they would discover less; mankind have long had the same propensity they have now, to try the medical virtues of every newly-discovered substance; and by looking back we should find the result of their experience, and save ourselves the trouble of repeating them.

It is not much out of place here to add, that the doctrine of what is termed catching cold, or catarrh, being at least as frequently owing to transitions from cold to heat as the contrary, which has lately been propagated with much industry as a novelty, is to be found in the Prolegomena of Sauvages, in the following words: “*Utrumque eum morbum a perspirationis repressione oriri sæpius putem, non minus notum est omnibus, eum non solum ab aëris subito refrigerio, vento frigido suscepto, sed etiam a subita post frigus aëris incalescentia ortum ducere, ut et ab insolatione; ita plures catarrho affliguntur vere quam hyeme, ob tempestatum vicissitudines.*” *Nosologia Methodica*, tom. ii. quarto edit. p. 35. Although this disease most frequently originates from repressed perspiration, it is not less obvious, that it not only arises from a sudden cooling of the air, or from exposure to a cold blast of wind, but that it is also produced by a sudden increase of the warmth of the air after cold, as well as from exposure to the sun; hence more people are afflicted with colds in spring, owing to the sudden vicissitudes of temperature, than in winter.

So true is the old adage, “*Nullum jam dictum est, quod non dictum sit prius;*” and even that has no claim to novelty, for, long previous to Terence, we are informed by the son of Sirach, “*that there is nothing new under the sun, but that which has been shall be.*”

If you approve of this communication, I may, perhaps, trouble you with some more detections of discoveries.

I am yours, &c. &c.

BOOKWORM.

Art. 16. *A real Case of Cancer successfully treated.* By
Dr. BUCHAN, Jun.

To the Editors of the London Medical Review and Magazine.

GENTLEMEN,

FROM the perusal of some communications in your last Number respecting cancer, it appears as if the author were of opinion, that no real cancer is susceptible of a cure; and that if any sore, which had been supposed to be cancer, were cured, the disease must have been mistaken. This kind of reasoning appears to be not only rather unfair, but injurious to the improvement of the medical art, by representing any further research in quest of a remedy for one of the most deplorable calamities that can afflict human nature, as a fruitless task. I confess I am inclined to entertain better hopes of the possible advancement of our profession; and if you think the publication of the following case will tend to excite the exertion of others, to try to discover a remedy for this melancholy complaint, it is much at your service.

Nearly ten years ago, I saw a lady with a fungous excrescence on the left ala nasi, of the size of a common pippin. It produced considerable pain, especially at the root of the nose, which occasionally darted all over the face and head. It had then existed four years, during the greater part of which it remained much in the same situation. It had been repeatedly consumed by caustics of various kinds, but always arose again in a very short time. The disease was generally supposed, by various medical men who saw it, to be of a cancerous nature. I also tried different escharotics, but with no better success than my predecessors. The fungus continued rather to increase in size, and to give more pain.

Mentioning the case to an old and respectable practitioner, he suggested a trial of what is called Plunket's caustic. I immediately prepared some of it, (the composition is well known, the ranunculus acris, flammula, arsenic, and sulphur.)

Eager

Eager to try my new remedy, I covered the fungus with the powder, applying over it, as directed, a bladder wet with white of egg. On visiting my patient next morning, I almost repented of my rashness; she had slept none the whole night, was in great pain, the nose much swelled, and the pulse indicating considerable fever. In twenty-four hours, however, all these unpleasant symptoms subsided; and on the third day the whole of the fungus sloughed off; on its under side were many little excrescences and processes, very like the irregular surface of the kernel of a walnut, leaving underneath a clean sore, which healed up in less than a fortnight. The lady is now alive, and continues perfectly well, and free from complaints of any kind; and the side of the nose on which this tumour was seated is hardly distinguishable from the other, except by being a very little puckered.

Dr. Rush, of America, mentions the great success of one Martin in curing cancers by an escharotic, probably of a similar nature. If the ingenious idea of Dr. Adams, that true cancer is a peculiar species of hydatid, has any foundation; why may it not be supposed, that, by thus destroying its imperfect vitality, the disease may be cured?

I recollect mentioning this case to the late Mr. J. Hunter at the time it occurred. He told me, he had seen two instances of soldiers, in Chelsea Hospital, cured of cancers in the cheek, by the same application, after the surgeons had determined on extirpation by the knife; and that the celebrated Count Haslang was cured of a similar complaint by the same means; which, however, afterwards recurred in the other cheek, and proved fatal. On my expressing my surprise, that a remedy so efficacious had fallen into disuse, I think his reply was, that surgeons derived more eclat from the use of the knife.

I am, Gentlemen,

Yours respectfully,

Store Street,

Dec. 14, 1800.

A. P. BUCHAN.

Art. 17. *Reply to Mr. Oliphant's Account of Mrs. Craib's Case of Cancer.* By WILLIAM NISBET, M. D. Fellow of the Royal College of Surgeons, Edinburgh, &c.

To the Editors of the London Medical Review and Magazine.

GENTLEMEN,

IN the nineteenth Number of your work was inserted a case of the cure of mammary cancer, as drawn up by Dr. Nisbet. The relation of that cure had excited much attention, and much medical scepticism has been betrayed on the subject; to favour which, in your last Number, a new statement has even appeared, under the title of "Information respecting the Case of Mrs. Craib, by Mr. Oliphant," the attending surgeon. As the title of this statement is clearly meant to imply a reflection on the former relation, it is my duty to reply to it fully; and to shew that the facts then advanced, and the principles of treatment then detailed, were equally just, and deserving the notice of the public.

In making this reply, I shall first examine the description of the disease presented by Mr. Oliphant; secondly, the principles assumed by him, as affecting the favourable termination of it; and, thirdly, remark on the analogous cases cited by him in support of these principles.

With respect to the description of the disease, little difference occurs to be noticed in the two statements; indeed, the morbid appearances were so strongly marked and characteristic, as not to admit of any. At the same time it will be apparent to every unprejudiced reader, how much, even in this part, Mr. Oliphant has endeavoured to strain every fact to favour his particular opinion. Every real cancer he considers as incurable, and he regards no disease as cancer that is curable. Laying down, then, this axiom, the malignity of the morbid appearances, in the present instance, which could not admit denial, he ascribes less to the specific nature of the malady, than to preceding errors in its treatment. But in this attempt,

attempt, like most people who deviate from the fair or candid line of conduct, he has placed himself in a most awkward dilemma; and by setting up his single *ipse dixit*, has opposed the opinion of some of the most respectable men of the profession. He has found it necessary, therefore, to omit altogether the names of the gentlemen formerly concerned with the case, and whose sentiments he was made acquainted with by the patient, as well as Dr. Nisbet; satisfying himself with giving Mr. Cline the appellation of a competent surgeon, and Sir James Earle that of an eminent and experienced one, but taking no further notice of any other person. Whether these gentlemen will be more offended by their names being formerly noticed as having merely seen the case, or now being declared ignorant of its real nature, and as having passed an erroneous judgment upon it, it is not my business to determine. Their names became introduced by me in consequence of the patient's own relation, and that with propriety, in order that they might have an opportunity of proving the authenticity of my statement. I consider them also as men of too much liberality and candour, and too much actuated by zeal for the improvement of science, to suppose them capable of taking offence on such grounds. The justice of their opinion I never could have a doubt of; for if ever there was a case of real idiopathic cancer, it is clearly exemplified in this instance. The disease had made its appearance at the cancerous or critical period of life. It had occurred in a constitution subject to rheumatic complaints, the connexion between which and future cancer is so well pointed out by the late Dr. Fothergill; and it had attacked more than one part of the system, without any injury being urged as giving origin to it in this second instance. It possessed also every pathognomic appearance of cancer to the examination of the surgeon, and every feeling of it to the patient herself; nor to this hour would any doubt have even arisen in Mr. Oliphant's mind respecting its nature, had it remained incurable, or had its cure proceeded altogether under

under his own direction. How trifling and ridiculous must his remark appear, which ascribes its malignity to a cataplasme of pigeon's dung applied by the patient's friend ! Such an application could have no bad effect without a primary inherent cancerous tendency within itself.

From these remarks on the description of the disease, I shall now examine the principle of cure ; and on this principle no difference of opinion can exist. That a constitutional disease will at one time suspend, and at another entirely cure a local affection, is a fact which every tyro in medicine is acquainted with ; but though acquainted with it as an acknowledged fact, much observation and experience are requisite, where this exertion of the powers of nature is wished to be imitated with success. Indeed, the proper application of this circumstance leads to a successful cure of most chronic diseases ; but in order to this success, the means employed will require to be as varied as the nature of the disease, or chronic affection, which is to undergo the change. It is on this principle entirely I conceive the cure of lues, or the constitutional venereal disease, to proceed. The action of mercury is properly nothing more than changing it from a chronic to an acute form, similar to small-pox and measles, or exciting and continuing a phlogistic action, or pyrexia, till the expulsion of the disease. This opinion I suggested fifteen years ago, in a treatise on that subject ; since that time I have found no reason to change my sentiments, in spite of the numerous chemical hypotheses and evanescent theories of the day. The operation of remedies, I am clear, can only be justly explained on principles consonant to the laws of the animal economy ; and the subjecting an animated machine to the laws of inanimate matter, is losing sight of the powers of vitality, and the peculiar energies of life, its leading distinction.

Agreeing, then, fully with Mr. Oliphant, in the general principle laid down, that the constitutional disease, in the present case, was the means of curing the local one, the only question

question betwixt us is, whether this constitutional disease was the effect of accident or art? In order to make it the former, the same disingenuous attempt is shewn, on Mr. Oliphant's part, as in the description of the morbid appearances; to detect which, it is only necessary for me to detail the particular course I employed. When I was first called in to see Mrs. Craib, the case appeared, as Mr. Oliphant justly observes, a hopeless one, and palliation was all the relief to be expected. This opinion I then gave will mark, at least, the formidable nature of the malady, and prove, that Mr. Oliphant had no favourable doubts at that period. I prescribed for her a diet-drink and a pill; the former with a view to produce some change in the state of the fluids, the latter for the particular purpose of exciting the action of the lymphatic system. An opiate was also enjoined, to be occasionally used as indicated by the urgency of pain. To the sore itself, a dressing of common cerate was applied, and the fermenting poultice laid aside at my desire, from the pain and irritation it constantly produces in every case of cancer. In this course the patient proceeded. Every day, according to her own account, she felt greater ease and abatement of pain, till the latter entirely ceased, and, as she expressed herself, she would not have known, from her feelings, any difference between the ulcerated and the other breast. She could now lie with ease on the affected side, and use that arm with freedom; circumstances to which, previous to the commencement of this course, she was a stranger. The breast itself shewed an evident shrinking of size; and Mr. Oliphant, at that period, observed, it was clear the progress of the disease was now completely checked. Reflecting on this favourable appearance, and desirous it might proceed more speedily, I now suggested to Mr. Oliphant the propriety of employing frictions, so as to send the same remedies directly through the diseased part, without the circuitous course of the system at large. To this measure he objected, from the state of the weather, and their supposed inefficacy.

efficacy. Confident, however, in my own opinion, they were applied according to my directions by the person mentioned in his statement, as having formerly attended the patient as a friend. This practice was continued for the space of six weeks, in the course of which time not only was the shrinking of the breast conspicuous, both to that person and the patient, but several of the smaller tumours surrounding the diseased mass were entirely absorbed; facts for the truth of which I appeal to themselves. So completely satisfied was the patient of this, that, not content with the friction at night, as employed by her friend, she had recourse to it herself in the day; and thus it was carried beyond what was necessary for the actual cure of the disease. The subsequent pleuritic attack, therefore, may be considered in part, perhaps, as the consequence of her own imprudence; and it was attended with the further mischief of interrupting the course too soon. During this time, the scirrhus breast shrunk in proportion to the other, but never shewed those strong marks of yielding softness till the course was at its height, at which period even external symptoms of inflammation were conspicuous on its surface; and when examined some time after by the gentlemen who saw her, it was so soft as hardly to bear the name of scirrhus, and in a daily decreasing state. From this period the management of the case, at Mr. Oliphant's special desire, was left entirely to himself; nor was I either consulted, nor, except from hearsay, knew what was employed.

What I see of the practice now, sufficiently shews me the impropriety of the application; but as it is his wish to claim all the merit of the cure to himself, and for that purpose his statement was written, it is not my business to interfere with the subsequent treatment. From the detail of the prior course it will be seen, that the progress of the cure was gradual, regular, and bore a proportion to the activity of the means employed; that the relief experienced was from the commencement of this course; and that the constitutional disease was

the consequence of the means employed, although aggravated by the imprudence of the patient herself in a degree beyond what was necessary; and perhaps, also, by the accidental causes which Mr. Oliphant takes notice of. The termination, however, has been favourable, and would have been much more complete, but for the intervention of these causes. On the whole, neither the patient herself, nor any person who saw her in her worst and apparently incurable state, will agree with the propriety of Mr. Oliphant's quotation from *Amatus Lusitanus*, that it is better to let the disease alone. In making the quotation, he might have gone even a good deal higher; for he will find the same observation a trite adage from the time of Hippocrates downwards; though, if it has any truth in it, it applies more properly to the early than advanced stage of the affection.

After this view of the case, it remains that I should examine the analogous cases cited by Mr. Oliphant in support of his statement. All his cases are evidently of a scrofulous nature; they were cured, the worst of them, by bark and carbonic acid, medicines which will always, in real cancer, do harm. The only one that applies in any degree to that of Mrs. Craib, from its occupying the same situation, is the case of Mrs. Osborn; but here the process of cure, when examined, is materially different. In Mrs. Osborn's case, nature, as it were, shrinking from itself, and unable to support a load, allows, at first, to lose its vitality, and then to separate; and on this separation such predominant weakness prevails, that the vessels are even unable to contract, or prevent excessive hæmorrhages, which continue for a length of time. The skin also in healing becomes puckered in, in the same manner as in the healing of other scrofulous ulcers; nor, during the process, is the axillary swelling removed, but it continues for a vast length of time in a diseased state. Where, then, is the comparison between this and Mrs. Craib's case? In the latter, a general increased action of the system appeared, and, from the moment

of its appearance, the process of absorption was strong and complete over the disease. No sloughing or separation took place, for the action of the absorbents was equal to the removal, and the time in which the process was accomplished displayed the presence of an active and daily increasing cause, goading on nature in her efforts, and threatening even injury to the system in order to its success. If inanition was the principle of cure in scrofula and cancer, as contended for by Mr. Oliphant, it is evident these diseases, amongst the lower classes at least, should be very readily cured; for nature could never be a loss to have abundant opportunities of employing her exertions on the enfeebled, worn-out constitutions of such patients. But is there an instance of this sort to be met with? Do not these diseases make much more rapid progress amongst the lower classes? and are not also the lower classes the most frequently attacked by them?

Before concluding, I shall only observe, that when the statement of Mrs. Craib's case was to be made out, I mentioned the propriety of it to Mr. Oliphant, in which he readily acquiesced. When it was afterwards made out, it was read to him by me, and he suggested one alteration, which, at his desire, I adopted, viz. that the cure was effected without sloughing, by increased absorption, in which it differed from any case he had ever seen.—According to every idea I could then form of a man's sentiments, the account drawn up by me, with this one alteration, had his unqualified approbation; and I even then told him, it should go in our joint names. On this conduct, I shall make no comment; the matter is before the public. Three more cases will be published by me in the course of a few weeks; this will sufficiently determine the point, and be the best answer to all the scepticism displayed on the subject.

In bringing Mrs. Craib's case into notice, it was my wish to call the attention of practitioners, in a particular manner, to this disease; and in doing so, to shew,

1st. That the general principle of exciting phlegmonic action to a certain degree, and continuing it, is sufficient to cure cancer, whether in the state of scirrhus or ulceration.

2d. That the preferable mode of exciting this action, is through the medium of the lymphatic system.

3d. That the lymphatic system, once excited, is capable of producing absorption equal to the removal of the most hardened mass of disease.

4th. That the cure is to be sought for in a proper selection of those substances which are most powerful in exciting the lymphatic system, and which continue this excitement in a permanent manner.

I am, Gentlemen,

St. James's Street,

Your obedient servant,

Dec. 17, 1800.

WM. NISBET.

Art. 18. *The following Signatures are added to the Testimonial in favour of vaccine Inoculation, of which we gave a Copy in our Fourth Volume, Page 90.*

NATHANIEL Hulme, M.D.	Henry Fearon,
Gilbert Blane, M.D.	James Gilder,
William Blackburne, M.D.	John Griffiths,
J. M'Namara Hayes, M.D.	James Higgins,
Andrew Thynne, M.D.	Lewis Leese,
Edward Fryer, M.D.	Edward Leese,
Sayre Walker, M.D.	William Lynn,
Richard Dennison, M.D.	John Mackinder,
Michael Underwood, M.D.	Jonas Malden,
Robert Batty, M.D.	Joseph Millington,
Thomas Garnett, M.D.	William Morris,
John Gibson, M.D.	John Pearson,
G. M. Burrows,	Thomas Rolph,
David Dundas,	John Rush,
Thomas Farquhar,	Stephen Woolriche.

We observe, that in some large towns the faculty have been induced to sign a public testimonial of their approbation of the vaccine inoculation. The names of these gentlemen in the town of *Leeds*, and cities of *Durham* and *Chester*, have come to our hands, and we have great pleasure in subjoining them.

In Leeds by

Stanhope Baynes, M. D.

Robert Davison, M. D.

Benjamin Hird, M. D.

R. W. D. Thorp, M. D.

Joshua Walker, M. D.

Obadiah Brooke,

Thomas Chorley,

T. A. Coates,

Samuel Dickenson,

William Dodsworth,

William Hey,

William Hey, jun.

Maurice Logan,

John Moxon,

Benj. Musgrave,

Thos. Parkinson,

John Robinson,

Thomas Rusby,

Matthew Shirtliffe,

John Soper,

James Tatham,

Thomas Teale.

In Durham by

G. Cayley, M. D.

Potts and Clifton,

J. James,

W. Green,

W. Ward,

G. Fothergill,

W. Ruddock,

— Nelson,

In Chester by

William Currie, M. D.

Wm. Houghton, M. D.

W. M. Thackeray, M. D.

James Arden, M. D.

D. Orred,

G. Rowlands,

S. Freeman,

George Harrison,

P. Wilkinson,

C. Tomlinson,

George N. Hill,

John Harrison,

J. Okell,

W. Connah,

Christopher Buck,

J. M. Assheton.

Meetings of the faculty have also been held at York, Hull, Birmingham, &c. and a similar resolution adopted.

Art. 19. *Announcement of the Spring Courses of medical and surgical Lectures in London.*

OUR Number for August last exhibited a very copious account of the different lectures relating to medical education. Most of the London teachers, we understand, renew their respective courses in the month of January; but we have at present been only solicited to announce the following:

1. Mr. WILSON's anatomical lectures and dissections, &c. at the Theatre of Anatomy in Great Windmill Street, Piccadilly; commencing on the 19th instant, and terminating about the middle of May 1801.

2. Mr. BROOKES' demonstrations and dissections, at his anatomical theatre in Blenheim Street, Great Marlborough Street; which will begin in the middle of this month.

3. Mr. PEARSON's evening lectures on the principle and practice of surgery, commencing on the 26th instant, at his house in Golden Square.

4. Mr. CHEVALIER's lectures on the principle and practice of surgery, beginning on the 26th instant, at his house, N^o 20 South Audley Street, Grosvenor Square, at seven in the evening.

5. Mr. H. LEIGH THOMAS's lectures on practical surgery, in which the different operations will be performed, and the medical treatment explained. This course begins at ten minutes after eight on Monday evening, January 26th, at Mr. Thomas's house in Leicester Square; where further particulars may be known, or at the Anatomical Theatre in Windmill Street.

6. Mr. AIKIN's lectures on the theory and practice of chemistry, with its application to arts and manufactures; commencing early in February, at half past seven in the evening, N^o 4 Broad Street Buildings.

* * * Further particulars of other lectures may be seen in our Review, No. xviii. for August 1800.

Art. 20. *Monthly Catalogue of new Publications.*

1. **A**N Essay on Phlegmasia Dolens; including an Account of the Symptoms, Causes, and Cure of Peritonitis puerperalis and conjunctiva, &c. &c. By JOHN HULL, M. D. Octavo. 369 pages. Bickerstaff, London. 1800. Price 6s. 6d.

2. An Essay on the malignant pestilential Fever, introduced into the West Indian Islands from Boullam, on the Coast of Guinea, as it appeared in 1793, 1794, 1795, and 1796. Interspersed with Observations and Facts, tending to prove that the Epidemic existing at Philadelphia, New York, &c. was the same Fever introduced by Infection imported from the West India Islands: and illustrated by Evidences founded on the State of those Islands, and the Information of the most eminent Practitioners residing on them. By C. CHISHOLM, M. D. and Inspector-general of the Ordnance medical Department in the West Indies. The Second Edition, much enlarged. Two volumes, octavo. Mawman, London. 1800. Price 16s.

3. Elements of the natural History and chemical Analysis of mineral Substances, for the Use of the Central Schools. Translated from the French of MATHURIN JAMES BRISSON, Member of the National Institute of Arts and Sciences, and Professor of natural Philosophy and Chemistry in the Central School at Paris. Octavo. 129 pages. Walker, London. 1800. Price 4s.

4. DR. SIGISMUND MALATS, Director of the Royal Veterinary College of Madrid, has just published a work on the Veterinary Art, comprised in nine quarto volumes.

5. The Physician's Portable Library; or, Compendium of the modern Practice of Physic: in which the Causes, Symptoms, and Treatment of all the Diseases incident to the human Body, are clearly and fully delivered; together with the Virtues, Doses, and proper Exhibition of all the medicinal
Simples

Simples and Compositions directed in the last London and Edinburgh Pharmacopœias. To which are added, Tables of the new Names adopted by each College, and of their Reference to those formerly in Use. By BRABAZON SMITH, M.D. Duodecimo. 256 pages. London, Matthews. 1800.

6. The Medical and Chirurgical Pharmacopœia, for the Use of Hospitals, Dispensaries, &c. By RICHARD REECE, Chepstow, Member of the Royal College of Surgeons in London, and the Medical Society of St. Bartholomew's Hospital, and late domestic Surgeon and Apothecary to the General Infirmary at Hereford. Octavo. 88 pages. London, West and Hughes. 1800.

7. Asthenology; or, The Art of preserving feeble Life, and of supporting the Constitution under the Influence of incurable Diseases. By CHRISTIAN AUGUSTUS STRUVE, M.D. Translated from the German by WILLIAM JOHNSTON. Octavo. 431 pages. London, Murray and Highley. 1801.

Art. 21. *Answers to Readers and Correspondents.*

1. **T**HE offer of A. P. B. to lend us the scarce old volume of YOUNG, entitled *Carrus triumphalis*, &c. will be thankfully accepted; as it will enable us to lay before our readers some curious extracts, especially what relates to the flap-operation.

2. Dr. DOMEIER's paper was unavoidably omitted in the present Number.

3. We acknowledge the receipt of a very polite letter of thanks, transmitted to us by the President of the PHYSICAL SOCIETY at Guy's Hospital.

4. A CONSTANT READER seems not to be aware that the "*list*" he wishes for, if continued regularly, would tend to exclude some of our practical materials, of which we aim to bring forward as large a portion as possible.

5. Dr.

5. Dr. WHITE's obliging letter on the effect of cancerous virus is just received, and will be inserted in our next.

6. The communications promised us by Dr. H. and Mr. P. will be acceptable.

7. In answer to Mr. C. . . we inform him that the reason we have lately omitted to mention the current price of drugs, is because we were told it was entirely useless to all our readers except those few who might wish to buy drugs in the market at wholesale prices, by the ton or hundred weight.

8. Any well-authenticated *facts* which Mr. K. may please to communicate, respecting a certain litigated point, alluded to in his letter of November 21st, will be candidly received. It was the manner, not the matter, of a former paper to which the Editors so strongly objected. Nothing of an empirical tendency can be admitted on any consideration whatever. The private inquiries, &c, will be privately answered.

9. The advice of a COUNTRY CORRESPONDENT, to abridge our monthly list of new foreign books, and not to omit the announcement of any English production, will certainly be attended to. In this and all other respects, we desire to accommodate our work to the general taste of our readers; and we are therefore always thankful for any hints tending to ameliorate our plan.

10. The prospectus of Dr. HULL's undertaking has been received; but, we are of opinion, it would be more generally acceptable in English than in Latin.

11. We should not refuse to adopt a closer style of printing, in order to augment the quantity of letter-press in every sheet, if it appeared to be the wish of our friends in general; but, as this would greatly increase our trouble and expense, as well as spoil the uniformity of our volumes, it is not intended to make so material an alteration until it shall be solicited by a greater number of readers.

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ANALYSIS OF BOOKS.

ART. I. *An Essay on Phlegmatia Dolens; including an Account of the Symptoms, Causes, and Cure of Peritonitis puerperalis et conjunctiva, &c. &c.* By JOHN HULL, M. D. Octavo. 369 pages. BICKERSTAFF, London. 1800. Price 6s. 6d.

IT is only within a very short time that the complaint forming the subject of this volume has been noticed by the medical writers of this country. In the year 1784, Mr. Charles White, of Manchester, published a treatise on the subject, accompanied with two beautiful engravings, representing the lymphatics of the lower extremities, and one of the lymphatics of the trunk of the body; the author conceiving them to be the seat of the disease. The engravings, we should observe, are the same as were published in the Second Part of the late Mr. Hewson's Experimental Inquiries into the lymphatic System;

Mr. White having obtained the loan of the plates, through the favour of Mrs. Hewson, the widow of that celebrated anatomist. Mr. White gives no specific name to the complaint. He calls his tract, *An Inquiry into the Nature and Cause of that Swelling in one or both of the lower Extremities which sometimes happens to lying-in Women*. He gives a short history of the disease, which was first noticed, he observes, by Mauriceau, but described afterwards more accurately by Puzos, who attributes it, as he was disposed to do most diseases incident to the parturient state, to a deposition of milk upon the part. Mauriceau supposed it to be occasioned by a deficiency in the flow of the lochia, although, as Mr. White justly observes, it happens indifferently to those who have an abundant flow of the lochia, and who suckle their children, as well as those who do not suckle their children, or whose lochia flow more sparingly. Levret adopted the idea of Puzos, as did also Sauvages, in his *Nosologia Methodica*: he calls it *ischias a sparganosi*, or a tumour from the deposition of milk upon the part, though the word *sparganosis* has been more usually applied to an intumescence of the breasts, from redundant milk. The late Dr. Hunter, as well as Dr. Denman, used to notice the complaint in their lectures; the latter called it *oedema lacteum*: but it does not appear they had either of them any fixed or definite idea of the nature of the complaint. Mr. White thinks the proximate cause to be an "obstruction, detention, and accumulation of lymph in the limb;" and as the disorder happens only to lying-in women, and is confined to the lower extremities, he concludes it to be occasioned by some bruise or other injury done to a principal lymphatic vessel, by the head of the child while passing through the pelvis. But as the complaint is by no means common, not occurring perhaps oftener than to one out of five hundred or more parturient women, this opinion has with great reason been controverted by Mr. Trye, surgeon to the Gloucester Infirmary, and others. Mr. Trye supposed the disease to be occasioned by an obstruction

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tion and inflammation of the lymphatic glands, arising either from some injury done to them, or from absorption of acrid matter. In the former case, it appeared soon; in the latter, not until several days or weeks after parturition. From whatever cause the complaint may arise, it is known to be very painful, tedious, and difficult of cure, though never proving, we believe, fatal. The method recommended by Mr. White was, to give gentle purges and sudorifics, and when the pain and febrile symptoms were subdued, the bark and other tonics: leeches and blisters to the part were also occasionally resorted to.

The author of the book before us takes a still more enlarged and extensive view of the subject than Mr. White has done, but follows in the same track; only instead of abstracts of the opinions of Mauriceau, Puzos, Levret, &c. he gives large quotations from their works, with critical observations upon them. Passing over these, we shall give the history and description of the disease in the author's own words, and then proceed to his account of its nature and cause, and the method of cure recommended.

“This disease,” the author says, “principally affects women in the puerperal state; in a few instances it has been observed to attack pregnant women; and in one or two cases nurses, on losing their children, have been affected by it. Women of all descriptions are liable to be attacked by it during and soon after childbed: but those whose limbs have been pained or anasarcous during pregnancy, and who do not suckle their offspring, are more especially subject to it. It has rarely occurred oftener than once to the same female. It supervenes to easy and natural, as well as to difficult and preternatural births. It sometimes makes its appearance in twenty-four or forty-eight hours after delivery, and at other times not till a month or six weeks after: but in general the attack takes place from the tenth to the sixteenth day of the lying-in.

“It has in many instances attacked women who were recovering from puerperal fever, and in some cases has super-

vened or succeeded to thoracic inflammation. It not uncommonly begins with coldness and rigors. These are succeeded by heat, thirst, and other symptoms of pyrexia; and then pain, stiffness, and other symptoms of topical inflammation supervene. Sometimes the local affection is from the first accompanied with, but is not preceded by febrile symptoms. Upon other occasions the topical affection is neither preceded by puerperal fever nor rigors, &c. but soon after it has taken place the pulse becomes more frequent, the heat of the body is increased, and the patient is affected with thirst, headach, &c. The pyrexia is very various in degree in different patients, and sometimes assumes an irregular remittent, or intermittent type.

“ Some writers have described the topical affection as happening to the superior extremities: but I have neither seen a single case of this kind, nor have I met with a genuine case related by any author.

“ The complaint generally takes place on one side only at first, and the part where it commences is various: but it most commonly begins in the lumbar, hypogastric, or inguinal region, on one side; or in the hip, or top of the thigh and corresponding labium pudendi. In this case the patient first perceives a sense of pain, weight, and stiffness in some of the above-mentioned parts, which are increased by every attempt to move the pelvis or lower limb. If the part be carefully examined, it generally is found rather fuller or hotter than natural, and tender to the touch, but not discoloured. The pain increases, always becomes very severe, and in some cases is of the most excruciating kind; it extends along the thigh, and when it has subsisted for some time, longer or shorter in different patients, the top of the thigh and the labium pudendi become greatly swelled, and the pain is then sometimes alleviated, but accompanied with a greater sense of distention. The pain next extends down to the knee, and is generally the most severe on the inside and back of the thigh, in the direc-
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tion of the internal cutaneous and the crural nerves : when it has continued for some time, the whole of the thigh becomes swelled, and the pain is somewhat relieved; the pain then extends down the leg to the foot, and is commonly the most severe in the direction of the posterior tibial nerve : after some time the part last attacked begins to swell, and the pain abates in violence, but is still very considerable, especially on any attempt to move the limb. The extremity, being now swelled throughout its whole extent, appears perfectly or nearly uniform, and it is not perceptibly lessened by an horizontal position, like an œdematose limb. It is of the natural colour, or even whiter; is hotter than natural; excessively tense, and exquisitely tender when touched; when pressed by the finger in different parts, it is found to be elastic, little if any impression remaining, and that only for a very short time. If a puncture or incision be made into the limb, in some instances, no fluid is discharged, in others a small quantity only issues out, which coagulates soon after; and in others a larger quantity of fluid escapes, which does not coagulate; but the whole of the effused matter cannot be drawn off in this way. The swelling of the limb varies both in degree and in the space of time requisite for its full formation : in most instances it arrives at double the natural size, and in some cases at a much greater : in lax habits, and in patients whose legs have been very much affected with anasarca during pregnancy, the swelling takes place more rapidly than in those who are differently circumstanced : it sometimes arrives in the former class of patients at its greatest extent in twenty-four hours or less, from the first attack.

“ Instead of beginning invariably at the upper part of the limb, and descending to the lower, this complaint has been known to begin in the foot, the middle of the leg, the ham, and the knee. In whichever of these parts it happens to begin, it is generally soon diffused over the whole of the limb; and when this has taken place, the limb presents the same

same phenomena exactly that have been stated above, as observable when the inguen, &c. are first affected.

“ After some days, generally from two to eight, the febrile symptoms diminish, and the swelling, heat, tension, weight, and tenderness of the lower extremity begin to abate, first about the upper part of the thigh, or about the knee, and afterwards in the leg and foot. Some inequalities are found in the limb, which at first feel like indurated glands, but upon being more nicely examined their edges are not so well defined as those of conglobate glands, and they appear to be occasioned by the effused matter being of different degrees of consistence in different points. The conglobate glands of the thigh and leg are sometimes felt distinctly, and are tender to the touch, but are seldom materially enlarged: and as the swelling subsides, it has happened, that an enlargement of the lymphatic vessels in some part of the limb has been felt, or been supposed to be felt.

“ The febrile symptoms having gradually disappeared, the pain and tenderness of the limb being much relieved, and the swelling and tension being considerably diminished, the patient is debilitated and much reduced, and the limb feels stiff, heavy, benumbed, and weak. When the finger is pressed strongly against it for some time in different points, it is found to be less elastic than at first, in some places retaining the impression of the finger for a longer, in other places for a shorter time, or scarcely at all. And if the limb be suffered to hang down, or if the patient walk much, it is found to be more swelled in the evening, and assumes more of œdematose appearance. In this state the limb continues for a longer or shorter time, and is commonly at length reduced wholly or nearly to the natural size.

“ Hitherto the disease has been described as affecting only one of the inferior extremities, and as terminating by resolution, or the effusion of a fluid that is removed by the absorbents: but, unfortunately, it sometimes happens that, after it abates in one limb,

limb, the other is attacked in a similar way. It all happens in some cases, that the swelling is not terminated by resolution; for sometimes a suppuration takes place in one or both legs, and ulcers are formed which are difficult to heal. In a few cases a gangrene has supervened. In some instances the patient has been destroyed by the violence of the disease, before either suppuration or gangrene have happened. As I have seen one case where the leg remained tumefied for some time, and a slight erysipelatous inflammation supervened, which was succeeded by several painful superficial ulcerations that remained unhealed for years, or, if healed, soon broke out again."

The author then relates four cases of phlegmatia dolens that have occurred to him since October 1797; of these we shall give the second, (the thirteenth recorded in the volume,) as less complicated and mixed, and giving a more decisive idea of the disease than the others.

"Mrs. Hulse, of Henry Street, Manchester, aged 28, was delivered of her fifth child, on the 8th of October 1797, by Mr. Wood. This, as well as her former labours, was difficult; but till this lying-in she had always recovered very well. No mention is made in my notes, whether her lower limbs were pained or swelled during pregnancy; and as she has removed from Manchester, I have not been able to procure any information relative to these points.

"On the 11th of October she was attacked with coldness, rigors, and other symptoms of pyrexia; and with violent pain in the right side of the abdomen, which began a little above the crista of the os ilium, and extended to the spine, and to the umbilicus. The left side remained perfectly free from pain. Her uterine discharge was abundant, and proceeded with regularity; her suck was at first in very small quantity, yet she continued to suckle her infant. On the day that the febrile symptoms took place, Mr. Wood gave her a laxative medicine and a saline julep.

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“ October 13th, The symptoms of pyrexia being abated, and the pain in the side of the abdomen much relieved, she was seized with a severe pain in the groin and superior part of the right thigh, which descended to the leg and foot; and a tense, courseless, elastic swelling of the whole limb supervened. —The line julep was continued: a fomentation and a liniment composed of camphorated oil and tinctura opii were directed to be applied to the affected limb; and a grain of opium, with three grains of pulvis antimonialis, and five grains of pil. æs cum myrrha were ordered to be taken at bedtime.

“ When the pain abated in the right thigh and leg, the other lower extremity was attacked in the same manner: but the left side of the abdomen remained free from pain. The internal medicines were continued, and the liniment was changed for the linimentum ammoniæ.

“ October 28th. I visited her this day for the first time. Both the lower extremities were considerably swelled, hot, tense, and exquisitely tender when touched; they were not discoloured, nor did they retain the impression of the finger in any part, except in a very slight degree. The pain was abated; but was still very troublesome on attempting to move her limbs; there was not any perceptible inflammation or enlargement of the lymphatic glands or vessels; her bowels were regular; the suck was rather increased in quantity; she experienced some degree of shivering once, and not uncommonly twice, every day; but these did not recur at any regular periods. Her pulse was small and frequent, beating more than 100 strokes in a minute; her heat was greater than natural; her tongue but slightly furred, yet she complained much of thirst, and also of want of sleep. I directed three grains of pulvis antimonialis to be taken every six hours; a powder containing one grain and a half of opium, one grain of squill, and one of calomel, to be taken at bedtime; and a liniment composed of tinct. opii and ung. adipis suillæ, to be applied very freely to the affected limbs three times a-day.

“ October

“ October 29th, The swelling and tenderness of her thighs were somewhat abated; but her legs remained as much swelled and as tender, when touched or moved, as before. She had slept better; her urine was neither high-coloured nor deficient in quantity. The other symptoms were nearly as on the preceding day.—Her medicines were directed to be continued.

“ October 30th, There was no material alteration in the limbs; she complained of considerable pain in the right side of the abdomen, and of costiveness. I directed a purgative, a blistering plaster to be applied to the pained part of her side, the antimonial powder to be continued, and opium, calomel, and squill to be taken in the quantity of one grain and a half of each at bedtime.

“ October 31st, Her legs were less tumefied, and the febrile symptoms relieved. She was directed to take a drachm of spir. ætheris nitrosi every four hours, in lieu of the pulvis antimonialis, and to continue her other remedies.

“ November 1st, Her limbs continued to improve. The dose of squill was augmented to two grains, and the calomel was omitted.

“ November 5th, Her health continued improving daily; the swelling of her legs was gradually subsiding. She was ordered to take one scruple of natron præparatum in an ounce and a half of tinct. gentianæ compos. warmed by the addition of a drachm of tinct. cinnam. comp. three times a day. The opium and squill were discontinued. A flannel roller was applied to each leg.

“ November 13th, Her general health was very much improved; one of her legs was greatly reduced, the other remained stiff and swelled, especially in an evening, and was pitted on pressure; but she could now bear to hang her legs down, and to walk a little. Her remedies were ordered to be persisted in.

“ November 29th, Both her legs were nearly returned to their natural size. She complained of difficulty and pain in

making water, on which account she was directed to take a drachm of spir. æth. nitrosi, with fifteen drops of tinct. opii every four hours in the daytime, and twice the quantity at bedtime, and to keep her bowels open with oleum ricini. Her other medicines were discontinued.

“ December 4th, The dysuria had ceased ; her general health was re-established ; there was scarcely any swelling of the legs. The lymphatic glands or vessels never appeared to be sensibly inflamed or enlarged, after I was called in to this patient, nor were they perceived to be so before I was called in, by Mr. Wood.”

The author next treats of the causes of the disease, under the three heads, of predisposing, exciting, and proximate causes. The first consists in an increased irritability, and disposition to inflammation, peculiarly incident to pregnancy, increased by an over-distended and relaxed state of the vessels of the lower extremities. The exciting causes, the author says, are, contusions or injuries of the abdominal and other muscles inserted in the pelvis or thigh, or of the cellular texture connected with these muscles ; occasioned by the long-continued pressure of the head of the child, in its passage through the pelvis ; the application of cold and moisture ; suppression or diminution of the lochia, or of the secretion of the milk ; food taken in too great quantity, or of too rich and stimulating a quality ; standing or walking too early after delivery, before the vessels of the lower extremities have recovered their tone. Our author does not admit, it will be observed, inflammation of the trunks of the lymphatics, assigned by Mr. White, or of the lymphatic glands, stated by Mr. Trye, as constituting causes of this affection. And yet, as he supposes the muscles and cellular texture connected with them may be bruised and injured by the passage of the head of the foetus, it seems equally probable that the lymphatic glands and vessels may suffer from the same cause. The proximate cause consists, he says, in an inflammatory affection, producing suddenly a considerable effusion

effusion of serum and coagulating lymph from the exhalents into the cellular membrane of the limb.

“ Whilst the pyrexia,” he says, “ which precedes or accompanies this complaint, proves beyond all doubt the existence of general inflammatory action or diathesis, the excruciating pain, stiffness, tenderness, increased heat, and swelling of the parts more particularly affected, equally evince the presence of topical inflammation.

“ The seat of the inflammation I believe to be in the muscles, cellular membrane, and inferior surface of the cutis. In some cases, perhaps, the inflammation may be communicated from these parts to the large blood-vessels, nerves, and the lymphatic vessels and glands imbedded in them; for it may be easily conceived, that these parts, though not very susceptible of primary and original inflammation, cannot always escape a participation of the disease, since they derive their arteries and veins from the same sources; and since, when the effused matter is purulent or unusually acrimonious, they may be considerably irritated by being immersed in it. The lymphatic system is peculiarly liable to suffer from acrimonious fluids, because these, in consequence of the absorbing function, are applied freely to the irritable internal membrane of the lymphatics.”

Having explained the nature and cause, the author proceeds, in the third section, to treat of the cure of phlegmatia dolens.

“ In this complaint,” he says, “ there are three periods which require different modes of treatment, and which are more or less distinctly marked, both with respect to the systematic and topical affections, in different cases. Hence, in delivering the method of cure, it becomes necessary to advert to these three stages.

“ In the first, which may be styled the inflammatory, phlogistic, or sthenic period, the affection of the system for the most part consists in an inflammatory diathesis, or increased tone and action of the heart and arteries, both with

respect to frequency and force; and the affection of the limb consists in a still more violent action of the arteries distributed to it, producing effusion and an extreme degree of tension of the skin.

“ For the removal of the systematic affection, the indications are,

“ 1st, To diminish the quantity of the circulating fluids.

“ 2dly, To remove or moderate those irritations to which the body is almost constantly exposed.

“ 3dly, To employ sedatives.

“ 4thly, To employ remedies which determine to the surface.”

We shall not trouble our readers with a detail of all the instruments or means recommended by the author, in fulfilling these indications, or accomplishing the proposed ends; and shall only observe, that in the third indication, viz. to appease the heat and pain of the part, or, to use the author's phrase, “ to diminish the action of the heart and arteries,” the digitalis is recommended. This indication, however, would be more safely, and we think more certainly, answered, by the exhibition of an emetic, followed by mild sudorifics and lenient purges, as recommended by Mr. Trye.

We cannot, on this occasion, refrain from expressing our decided disapprobation of a custom now becoming common, of exhibiting the most violent and deleterious medicines upon every light occasion. We observed, with no small surprise, the author before us giving to a delicate lady, as he describes her, (see p. 140 of this Essay,) in the eighth month of her pregnancy, for anasarcous swellings, (occasioned, as he himself observes, by the pressure of the uterus; and therefore, as he ought to have known, not to be removed until the uterus should be emptied,) compositions, with digitalis, squills, opium, scammony, and calomel. These medicines not only produced no advantage, but were evidently mischievous; for after using them some days, the author says, p. 144, “ Her appetite

appetite and digestion evidently grew worse, without any abatement of the dropsical symptoms." He still, however, persisted in the use of the pills for some days longer, and then only changed them by substituting extract of gentian for the scammony and calomel, and so continued the use of the digitalis for the space of a month, "but without deriving," he says, "any advantage from them." On the contrary, the patient is now described as afflicted with cough, heartburn, difficulty of breathing; she made water only twice in the twenty-four hours, and in very small quantities; her appetite continued declining; she was troubled with occasional vomiting, purging, &c.: labour at length coming on, relieved her from her burden, and by degrees of the water effused in the cellular membrane. Her recovery was slow, and she suffered, in the course of it, an attack of peritonitis, and afterwards of phlegmatia dolens, which the author considers as the same complaint, only varying in its seat. The observations on which Dr. Hull founds this opinion are detailed in the third and last chapter. For these, which are conceived with much ingenuity, we refer our readers to the volume. In this chapter the author examines the methods of cure recommended in the peritonitis, or puerperal fever, the one by M. Doulcet, which consists in the exhibition of repeated doses of ipecacuanha; the other by Dr. Gordon, of Aberdeen, who cured upwards of thirty patients in the disease by bleeding largely on the first attack, and then giving purges and opiates.

"When two very different methods of treating an extremely dangerous disease are represented as infallible by their respective inventors or abettors, a suspicion naturally arises, that one or both parties have been deceived. As both M. Doulcet and Dr. Gordon have laid particular stress upon the employment of their remedies immediately after the attack of the disease, it does not seem improbable that in many instances it was not puerperal fever, but some other complaint of a less dangerous tendency, that was cured; because other febrile affections

fections take place in puerperal patients, which are not always easily distinguishable on their first appearance from peritonitis puerperalis. It must be allowed, however, that this complaint is much more manageable at its commencement, and that as M. Doulcet's method was employed for the cure of patients confined in a crowded hospital, whilst Dr. Gordon's was used for the treatment of women in a colder climate, and in private practice, each of these two methods of cure might in general be properly adapted to the respective patients who were to be treated according to them.

“From what I have seen,” the author adds, “of this complaint, I am of opinion, 1st, that an emetic, administered early, will cure the disease in many cases; 2dly, that general bloodletting and brisk purging may in other cases be employed freely with success; 3dly, that these two methods may in some instances be advantageously combined; 4thly, that in some cases the disease may be cured without employing either general bloodletting, emetics, or brisk cathartics; 5thly, that other remedies, which have been neglected as useless and unnecessary, or condemned as hurtful, may be joined with Doulcet's and Gordon's plans with very great advantage.”

The author then lays down various modes of treating the disease, adapted to different constitutions and circumstances; and then treats of peritonitis occurring to women who are not pregnant, to men, and to children.

“Women who have not lately been impregnated,” he says, “and men and children, are liable to a less acute kind of inflammation of the peritonæum, in which an extravasation of coagulating lymph takes place, and occasions more or less extensive adhesions betwixt the abdominal viscera, or betwixt these and the peritonæum investing the cavity of the abdomen. From this circumstance I shall give it the name of peritonitis conjunctiva.”

Some cases illustrative of this position are described: the author then proceeds to shew the analogy of phlegmatia dolens with rheumatism and erysipelas.

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“ In rheumatismus pain is sometimes felt before any febrile symptoms make their appearance; but it not uncommonly begins with a cold stage, which is succeeded by increased heat and other symptoms of pyrexia, and then pain is perceived in one or more of the large joints, which also affects the muscles to a greater or less distance from the articulations.

“ After the pain has subsisted for some time, a swelling, and, for the most part, a redness of the part or parts affected supervene, by which the pain is relieved: but the part is hot, tense, elastic, and exquisitely tender when pressed or moved. The complaint passes from one articulation or limb to another. Suppuration or gangrene very rarely takes place. The matter which is effused is generally completely absorbed sooner or later. The lymphatic vessels are rarely if ever primarily inflamed or enlarged.

“ The analogy betwixt this disease and *phlegmatia dolens*, especially at their first formation, is so striking, that the latter might without impropriety be placed as a species of rheumatismus, under the title of *R. puerperalis*, with a reference to *phlegmatia dolens*. There is also an analogy betwixt them, with respect to their occasional and proximate causes, method of cure, &c.

“ In erysipelas the symptoms of pyrexia sometimes precede, and at other times accompany or succeed to, the topical affection, which consists in a diffused swelling, redness, heat, pain, and tension. After some time the inflammation spreads to another part, whilst the part first affected returns more or less nearly to the natural colour, but remains for some time tumefied and tender, and often retains the impression of the finger. There is no primary inflammation or enlargement of the lymphatic vessels.

“ From this short view of the symptoms of erysipelas, it appears that there is a considerable analogy betwixt it and *P. dolens*, the former differing from the latter complaint principally in this, that the inflammation for the most part affects
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the outer surface of the cutis, or the cutis only, and not the cellular membrane, and occasions an intense redness, which is sometimes accompanied with vesications, and is pretty constantly succeeded by desquamation of the cuticle."

The author concludes with giving the characters and synonyms of phlegmatia, and its species, with their most proper place in the nosological system of Cullen. This part will not admit of being abridged.

ART. II. *Selectus Instrumentorum chirurgicorum in Usus discentium et practicorum Tabulis exaratus. Cum Usus Declaratione edidit* THOMAS KNAUR, Chirurgiæ et Artis obstetriciæ Doctor, et Professor publicus ordinarius in Cæsareo-Regia Universitate Leopoli Galiciæ. Cum Indice Tabularum et Instrumentorum trilingui, Latino, Germanico, Gallico. Folio. 48 pages. ALBERTI, Viennæ. 1796. Price 1*l.* 1*s.*

THIS work is not meant to supersede those of Brambilla, Richter, and other modern authors, who have given us engravings of surgical instruments; but is rather designed as a selection of such as are in common use. To the English practitioner, we believe, the collection of Mr. Savigny will be much more useful than this; although it is to be regretted that the price of his volume is so high as three guineas, and will be still more expensive when the appendices are super-added.

See our Review of Mr. Savigny's work, vol. i. p. 41.

The number of instruments here represented is two hundred and eighty-four, distributed in twenty-five plates, neatly executed. Among them we observe many which are either so familiar as not to need any representation, or so obsolete that they might well have been omitted. The descriptions are given both in the German and Latin languages. An index is likewise prefixed, wherein the French names are added.

ART. III. *Engravings of two uterine Polypi.* By THOMAS DENMAN, M.D. London. 1801.

DOCTOR DENMAN has just published engravings of two uterine polypi, from preparations in the museum of the late Dr. Hunter. They are represented in situ, are both of them very large, the one taking its rise from the fundus of the uterus, to which it adheres by a pedicle about an inch in length, and the thickness of a finger. Several attempts were made to fix a ligature round the stalk, but without success, the bulk of the polypus preventing it. The other polypus also took its rise from the fundus of the uterus, which was drawn down and inverted: it had no pedicle. In attempting to take it off by a ligature, part of the fundus of the uterus was included in the noose, which hastened the death of the woman: the body of the uterus was found cut by the ligature.

The plates are of a folio size, and are exquisitely engraved. The descriptions are in English and in French, with references to the third chapter of the Doctor's Introduction to the Practice of Midwifery, in which the subject of uterine polypi is discussed.

ART. IV. *Mémoires de la Société Médicale d'Emulation, séante à l'Ecole de Médecine de Paris; avec des Planches en Taille-douce. Pour l'An VI. de la République Française. Seconde Année.* Octavo. 516 pages. RICHARD, Paris. An VII. Imported by DE BOFFE.

IN the last Number of our Review we gave a general account of the constitution of the Society of Emulation, and of the memoirs contained in their first volume: we shall now give a brief analysis of such of the papers contained in the second part as appear to us most deserving attention. The volume opens with a preliminary discourse by M. Alibert, secretary to the Society, on the connexion of the science of medicine with natural and

moral philosophy. In this, however, we see nothing to arrest our attention, nor in the two following papers, on fluxions, and on bilious fevers, the first by P. J. Barthez, the other by A. Richarand ; we shall therefore proceed to the fourth paper in the volume, containing

Observations on those Symptoms of Syphilis usually occurring in Children born of infected Parents. By P. A. O. Mahon.

It has been disputed, the author says, whether the foetus ever receives the infection while contained in the womb ; but as women highly infected frequently bring forth children dead and nearly putrid, and others children exceedingly emaciated, their skins appearing as if macerated, and disfigured with livid spots ; such children, he thinks, died of or were infected with the venereal virus. Now as these appearances occur in the offspring of parents who are unhealthy, but not affected with the venereal disease, they cannot always be attributed to that source. We know also, that children, born of parents manifestly infected with the lues, are frequently plump and apparently healthy, and shew no symptom of the disease until fourteen or more days after their birth. Those children, there can be no doubt, receive the infection while passing through the vagina. One of the most frequent and early symptoms of the disease in newborn children, the author tells us, is ophthalmy, or inflammation of the eyes and eyelids, attended with a profuse purulent discharge, terminating, unless relieved early, in total loss of sight. Spots on the skin, pustules, ulcerations, warts and fissures about the anus and pudenda, and falling off of the nails, conclude the catalogue. These symptoms, the author observes, were rarely all of them present in the same subject, and some of them were more generally prevalent at particular seasons. A similar remark, he says, has been made by Citizen Noel, in a Memoir published by him.

Observations on human urinary Calculi. By A. F. Fourcroy.

As the result of a great number of experiments made by the author, in conjunction with Mr. Vauquelin, his pupil and
assistant,

assistant, he found that human urinary calculi are not composed solely of a peculiar acid, which Scheele calls lithic acid, but which, he thinks, may more properly be called *acide urique*, uric acid, and phosphate of lime; and that in some calculi little or none of this acid is found. Dr. G. Pearson, however, has anticipated him in this, as well as in most of the remaining suggestions contained in this paper.

The next memoir contains miscellaneous observations on a variety of complaints, by J. Burdin. Several cases are related, and the attention of the practitioner is particularly drawn to those symptoms that lead to a knowledge of the part injured, the nature of the injury, and the appropriate methods of cure.

On the Nature and Treatment of Melena, or the black Disease.

By A. Portal.

The patients in this disease vomit from time to time a black matter or substance, which by the ancients was supposed to be bile. The same matter is frequently mixed with their stools. Later observations have shewn that this is pure blood, which distils into the stomach through the abraded coats of the veins or arteries of the viscus. Enlargements of the liver, spleen, pancreas, or any cause obstructing the return of the blood from the stomach and intestines, may lay the foundation of this symptom. The disease is by no means unfrequent, our author says; but being unhappily mistaken for a bilious complaint, the medicines resorted to, such as vomits and tonics, have in most subjects a tendency rather to hasten than retard its fatal termination. To discover the real nature of the substance discharged, from which the disease or symptom takes its name, it should be separated from the bile or other local matter accompanying it, and washed in pure water: it will then be found insipid, inodorous, and neither imparting a yellow nor green colour to the water, which inspissated bile would inevitably do. The author opened several persons who died of the complaint, and found, in all of them, hardness or enlargement of one or other of the abdominal viscera

in the neighbourhood of the stomach, and the veins of that viscus, and of the duodenum inordinately distended; frequently livid patches were observed on the internal surface of the stomach and small intestines, on parts corresponding with the enlarged veins, at which places, on lightly pressing the parts, a blackish humour was made to transude.

As the disease arises from various causes, and affects persons of very different habits and constitutions, the mode of cure must be similarly varied; vomits, however, can in no cases be admitted. In sanguine habits, and when the disease is early attacked, general bleeding may be of use. Where it may be supposed to be occasioned by a suppression of the menses, hæmorrhoids, or any accustomed evacuation, bleeding in the feet, or leeches applied to the arms, and from time to time repeated, will be found to be useful. Costiveness is to be obviated by the frequent repetition of mild aperient medicines; and in debilitated constitutions, we must have recourse to bark and other tonics. By these means the author restored several patients, some of whom had been long afflicted, or had suffered frequent attacks of the disease.

Observations on Diabetes. By J. F. Coindet.

This disease has been more frequently noticed, the author thinks, and more accurately described by the English than by any other writers; his account is therefore principally transcribed from their works, which he appears to have read with attention. Some ingenious comments are added. He considers the mode of treatment recommended by Dr. Rollo, as well as all those that have preceded his, as merely palliative. Until we are better instructed as to the cause of the disease, he observes, we shall in vain look for a regular and systematic method of cure.

Observations on certain Circumstances in Diseases, rendering them unfit for pharmaceutical Treatment; or, in other Words, the Art of curing by Expectation. By J. L. Moreau de la Sarthe, Stahl, and our countryman Dr. Gideon Harvey, have each

of them left publications on this subject, which the author handles with considerable ingenuity; but his observations are too extended for insertion here, and will not readily admit of being abridged. In the cure of those complaints that pass under the denomination of nervous, he supplies the place of antispasmodic medicines by exciting the more pleasurable affections or passions of the mind. The memoir concludes with considerations, psychological and medical, on consumption, principally that kind which is occasioned by chagrin or vexation: this, the author says, will make the subject of a separate volume he means shortly to publish. From the specimen here given, much new and ingenious information may be expected.

Observations on the moral Treatment of Insanity. By Ph. Pinel,

This paper also, the author says, will hereafter be extended into a regular treatise on the subject. He depends principally, in his attempts to cure maniacal disorders, on managing the affections of the mind, particularly on turning the attention of the affected to objects the reverse of those that occasioned the disease, and on engaging them in some salutary and active employment. He proscribes all medicines, except in some particular cases, where means similar to those we have noticed cannot take place.

The next class of papers, which are surgical, we shall resume in our subsequent Number.

ART. V. Dr. WILSON's *Treatise on febrile Diseases, Vol. II.*

(Concluded from page 266.)

IN examining what remains of this work, we shall be less diffuse than in the former part. The following section treats of the varicella or chicken-pox. This disease has been sometimes mistaken for the small-pox. But there is usually less fever or illness preceding the eruptions, which are smaller than those of the small-pox, and have on the second day small bladders

bladders filled with a limpid fluid on their apices. On the third, or at the latest on the fourth day, the pustules have attained their full size, or maturity; and on the fifth day they become dry and covered with a crust, the fluid never putting on the appearance of pus or matter. This disease is so mild as rarely to require medical treatment.

The next chapter treats of the rubeola or measles.

The author divides measles into the regular and the irregular. The former is the more common species, and is well known, and the mode of treatment sufficiently understood; the irregular or putrid measles are more rare, and extremely dangerous.

The following are the symptoms distinguishing the irregular from the regular measles:

“ 1. All the symptoms, whether febrile or catarrhal, are generally more violent in the irregular than in the regular measles.

“ 2. The fever in the former always shews a tendency to typhus.

“ 3. In the regular measles, the affection of the fauces always resembles that produced by cold; in the irregular, the fauces are frequently livid, and often assume completely the appearance of the cynanche maligna.

“ 4. The duration of the different stages of the irregular measles is more uncertain. The eruptive fever, as well as the eruption, in regular measles, continue for a certain length of time, at least never much exceed or fall short of it. In the irregular measles, the course both of the one and the other is sometimes very rapid, at other times very lingering.”

Dr. Watson gives the following account of the appearances observed on dissecting the bodies of several children who died of the irregular or putrid measles, in the Foundling Hospital, in the years 1763 and 1768, when that disease was epidemic.

“ In some,” he says, “ who died of laborious respiration, after the feverish heat and eruption were past, the bronchial system was found very little loaded with mucus, but the substance

stance of the lungs was tender, and the blood-vessels were very much obstructed and distended. In some who died of laborious respiration and extreme debility, many strong adhesions were found between the lungs and pleura. The lungs were distended with blood, and part of them had begun to sphacelate. Part of the jejunum was sometimes inflamed, and contained several worms." In some who died suddenly, it was found that the sphacelus of the lungs had occasioned a fatal hæmorrhagy. "Collections of purulent matter," Dr. Watson adds, "were observed in none; on the contrary, in this putrid disease, every morbid appearance indicated a sphacelus."

The fourth chapter treats of the scarlet fever. This disease is either simple or attended with affection of the throat, when it is called scarlatina cynanchica. The former species is rarely epidemic or dangerous; the latter frequently is highly epidemic, malignant, and dangerous.

After giving a correct history and description of the disease, the author sets before his readers the more prominent symptoms from which a prognosis of the event may be collected.

"If the scarlatina makes its attack with only a degree of lassitude, languor, dejection of spirits, and shivering, the disease promises to be less dangerous, and to approach less to the nature of cynanche maligna, than when, along with these symptoms, the patient is troubled with anxiety, nausea, and vomiting.

"If the internal fauces are of a florid colour, and considerably swelled, with difficult and painful deglutition, the prognosis is better than when they appear of a dark red or purple colour, without swelling, the deglutition being easy, and attended with little or no pain.

"If the specks which appear about the tonsils, velum pendulum, and uvula, be of a whitish colour, and are not soon changed into ulcers, the disease is more favourable than when they are of an ash or brown colour, and become ulcerous at an early period.

"When

“ When there is no running from the nose, or such as produces no excoriation, the prognosis is better than when a thin, acrid, and fetid secretion runs from it.

“ It is also a sign of the mildness of the disease to be unattended with purging, and of great danger when the purging excoriates the anus.

“ When the pulse is strong and full, the complaint is less dangerous than when it shews a tendency to become weak and irregular.

“ When the patient bears the complaint well, and without much loss of strength, his situation is more favourable than when he is restless and debilitated.

“ When the mental functions remain unaffected, the prognosis is better than when delirium or coma supervene.

“ If the eruption is delayed till the third or fourth day, the disease is safer than when it appears on the second. When it appears on the first day, the prognosis is generally bad.

“ When it is universal, every part of the body becoming uniformly red, the prognosis is better than when it comes out here and there in stains or blotches, or in small points.

“ When its appearance is followed by a remission of the symptoms in the throat, the prognosis is more favourable than when the affection of the throat increases. A tendency to swelling in the neck, hands, and feet, and the eruption being less considerable on the trunk than extremities, add to the unfavourable prognosis.

“ The same may be said of the eruption appearing unsteady, and the fever not remitting at the period of desquamation.

“ Glandular swellings also are unfavourable symptoms.

“ When the dyspnœa is considerable, without much swelling about the throat, there is reason to apprehend that the inflammation has spread to the trachea, which is always an alarming accident. The inflammation also sometimes extends
along

along the œsophagus to the stomach, or along the Eustachian tube, occasioning acute earach.

“ Hæmorrhagies in general are unfavourable, unless at an early period, and when the excitement is considerable. Bloody saliva in particular denotes an unfavourable state of the fauces.

“ All anomalous consequences of the scarlatina are to be dreaded.”

In the next chapter the author treats of the plague.

Although it will probably fall to the lot of very few physicians in this country to have opportunities of seeing persons attacked with this complaint, a general treatise on fever, as the author rightly observes, would be imperfect if it did not contain an account of it, and of the modes esteemed most efficacious in checking its violence. For these, which appear to be collected from the best writers on the subject, we must refer our readers to the volume, having already extended our review of this work beyond our usual limits, led thereto by the quantity of useful and interesting matter contained in it.

The sixth and last chapter exhibits an account of the urticaria, essera, or nettle rash. This rarely appears as an original disease, is of short duration, and so mild as scarce ever to require medical assistance.

ART. VI. *Rapport sur la Vaccine ; ou Réponse aux Questions rédigées par les Commissaires de l'Ecole de Médecine de Paris, sur la Pratique et les Résultats de cette nouvelle Inoculation en Angleterre, et dans les Hospices de Londres, où on l'adopte.*
Par A. AUBERT, Docteur en Médecine. Octavo. 72 pages.
RICHARD, Paris. An ix.

THE accounts which reached France of the happy success attending vaccine inoculation in England, soon induced the National Institute to appoint commissaries for the purpose of
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examining the subject. The cow-pock was not at all known on the continent, and the stock of vaccine matter transmitted thither from London either failed or lost its efficacy in a short time. The disappointment which the author met with in his first experiments at Paris made him adopt the resolution of visiting this country: and we are here presented with the result of his observations. The vaccine matter now used at Paris was derived from some which Dr. Woodville conveyed thither, in conjunction with the author, and originally was taken from the Small-pox Hospital in London.

In the description given by Dr. Aubert of the symptoms and progress of this disorder, we perceive nothing remarkable or novel. The English reader will, therefore, not desire us to repeat here what has so frequently been published before. In treating of the pustular eruptions, he observes that they very seldom occurred, unless the patients had been accidentally or designedly exposed to a variolous atmosphere: hence it may be justly concluded, that they were not in any case the consequence of the vaccine, but of the small-pox infection. Our author, we remark, is of a different opinion; he thinks, with Dr. Woodville, that these pustular eruptions are sometimes the genuine produce of vaccine inoculation; and he unguardedly affirms, that this opinion is admitted by *all* our inoculators, "*tous les inoculateurs en conviennent actuellement.*" On the contrary, it is generally disbelieved in England, that varioliform eruptions are ever occasioned by the cow-pock virus; and it is *now* admitted by Dr. Woodville himself that, if it actually does happen, it is an extremely rare occurrence.

In a letter published by this physician during the last month, he says, "It appears from my last publication on this subject, written about six months ago, that the number of persons who had then received the vaccine infection at the hospital exceeded two thousand five hundred; since that time upwards of fifteen hundred have been inoculated for the cow-pox at the same place, and of these I have a report to present

similar

similar to that stated by me in July last, viz. With none of the patients did the infection occasion a severe disorder, or excite one alarming symptom.—The number of pustular cases under the vaccine inoculation, in the hospital, has been even less than three or four out of an hundred, the proportion in which such cases were stated to occur at the period above mentioned. *Respecting those to whom I have communicated the infection out of the hospital, or among my private patients, I have not yet met with one instance in which variolous-like pustules took place.* Indeed, I am convinced an eruption of that appearance will be found to be a very rare occurrence, unless previously to the vaccine inoculation, or during its local progress, the patient has been exposed to the action of variolous matter. Though such an exposure may not have been known, nor even suspected to have taken place, yet this will not be deemed an objection of much weight against the opinion here advanced, when it is considered that the same observation will apply to four fifths of all who casually receive the small-pox. If a person who has been exposed to the contagion of the small-pox for four or five days be then inoculated for this disease, the inoculation anticipates or prevents the effects of the contagion, and the inoculated small-pox is produced. But if the vaccine inoculation be employed in a case thus circumstanced, the small-pox is not prevented, although the tumour produced by the inoculation advance to maturation. Hence we are to expect that the casual small-pox will more often supervene to the vaccine than to the variolous inoculation."

Upon the whole, we are decidedly of opinion, with Dr. Jenner, and almost all other British inoculators, that whenever the varioliform eruptions take place, they are the effect of the small-pox poison some how or other communicated to the patient; and it seems to us highly probable, that these eruptive appearances are rendered milder than they would if the patients had not been previously under the influence of vaccine inoculation.

The author informs us, that while he was printing his report, a memoir had been published by Dr. Odier, of Geneva, from which it appears that six hundred persons were inoculated at that place, with exactly the same result as in England.

ART. VII. *A Compendium of the Anatomy of the human Body; illustrated by upwards of one hundred and sixty Tables, containing near seven hundred Figures, copied from the most celebrated Authors and from Nature.* By ANDREW FYFE, Edinburgh. Three Volumes, 4to. With a large whole-length Figure of the Absorbents. Sold by LONGMAN and REES, and KAY, London. 1800. Price 5*l.* 5*s.*

THIS is undoubtedly the most complete collection of its kind for the use of English students. Many of these engravings are well executed, and some of them are neatly coloured; but their merits, we must acknowledge, are not equally entitled to our praise. Upon the whole, however, Mr. Fyfe has conferred no small favour on young anatomists, by presenting them with so extensive an undertaking.

ART. VIII. *A Compendium of the Anatomy of the human Body. Intended principally for the Use of Students.* By ANDREW FYFE, Edinburgh. In two Volumes, 12mo. 1800. Price 10*s.* 6*d.*

THE letter-press, without any references, contained in the work we have last noticed, is here closely printed for the purposes of a vade-mecum. We have no where met with so much anatomical information in so narrow a compass. To the student, this little performance will therefore be highly acceptable.

ART.

ART. IX. *Views of the Bones, Muscles, Viscera, and Organs of the Senses. Copied from the most celebrated Authors; together with several Additions from Nature. The whole consisting of twenty-three folio Tables, with Explanations.* By ANDREW FYFE, Edinburgh. 1800. Price 1l. 1s.

ALL the plates contained in the volume before us are also to be found in the larger collection already reviewed, and were published at the same time. We scarcely need add, that this work is much less complete than the other, and that none of the engravings are coloured.

ART. X. *Leçons d'Anatomie comparée de G. CUVIER, Membre de l'Institut Nationale, Professeur au Collège de France, et à l'Ecole Central du Pantheon. Recueillies et publiées sous ses Yeux, par C. DUMÉRIL, Chef des Travaux anatomiques de l'Ecole de Médecine de Paris.* BADOUIN, Imprimeur de l'Institut, Paris. Two Volumes, Octavo. 1800.

COMPARATIVE anatomy is as yet in its infancy, being nothing more than an imperfect collection of the labours which several learned men have bestowed upon its elucidation. Hitherto it could not be said to have passed the limits of its first period. We believe we do not overrate the merits of the work before us, when we express our opinion that it will form the commencement of the second.

This publication is not merely a systematical arrangement of the detached observations which we formerly possessed relative to the structure of animal bodies; the great variety of new facts which it contains entitles it to a more distinguished place in the annals of science. Of comparative anatomy the materials or rudiments had already been collected; but its real existence as a science will first commence when this important work shall be completed.

To

To be placed in as favourable a situation for such an undertaking as Citizen Cuvier was, can fall to the lot of but very few. The noble collections of the Museum of Natural History presented him with opportunities for examining the products of nature, which it would be vain to seek in any other part of Europe. Thus all the descriptions which the nature of our climate did not permit to be made from subjects recently dead have been given according to preparations which may still be consulted.

Citizen Cuvier had, as his associate in these labours, Citizen Duméril, his pupil and friend, who not only assisted him with his pen, but by the variety of striking observations and curious facts which he has exhibited; and the invention of a nomenclature applicable to the organs of every class of animals, lays claim to the particular esteem of all who interest themselves in the improvement of comparative anatomy.

The part of this work already published contains the treatise on the organs of locomotion, the brain, the nerves, and the senses. It is evident that a work like this cannot be subjected to a regular analysis without much difficulty. When each division of a treatise turns upon a few leading ideas, illustrated by a great number of accessory ones, one may, by retrenching the latter, and exhibiting the former in an insulated form, give in the extract almost the whole substance of the original work; but when every page presents us with new facts, when every line forms a part of a description, all that can be done is to notice the principal results.

General observations on the animal economy precede the description of the particular organs, and form the introduction to the work. Life is first considered under the numerous relations appertaining to its nature, its origin, the structure of the organs which concur in producing its phenomena; the distinction which it constitutes between organic and inorganic bodies, and that by which it is characterized in vegetables and animals. A general view of the functions of the latter is deduced

deduced from these reflections, to which succeeds a rapid sketch of the parts of which the animal body is composed, and of the purposes which they are intended to serve.

Next follows an investigation of the grand varieties by which life is modified *ad infinitum* in the different species of animals. These varieties are considered in their relations to each particular function,—to the power of locomotion, to the senses, to digestion, absorption, respiration, the voice, generation, &c. This article leads to another of very great importance, and which affords an excellent specimen of the philosophic method according to which comparative anatomy ought to be treated. Here are considered the relations which subsist between the variations of the different systems of organs, with a view to demonstrate how the mode of existence peculiar to each is connected with that of the rest; how, when one member in the series of animals falls into decay, disappears, or acquires an increase of strength, another must in consequence assume characters either analogous or opposite; how the mode in which digestion is performed, and the nature of the aliments with which the animal is nourished, are necessarily connected with the peculiar forms of the locomotive organs; how the nervous system and the organs of respiration correspond with each other, &c. &c. To us it appears, that this new method of investigating the nature of the animal functions will essentially contribute to the improvement of physiological science, when the state of our knowledge shall render the range of its application sufficiently extensive.

The classification of animals forms the subject of the next article. This is entirely founded upon a comprehensive view of their organization, and proves how far superior the characters derived from anatomy are to all others, as a foundation for the requisite divisions. Nine engravings annexed to the first volume exhibit a view of this mode of classification, which is far more conformable to nature than that adopted by the author in his *Elements of Natural History*.

After

After these observations on the animal economy, he proceeds to the consideration of the organs of motion, of which he first treats in a general manner. He then directs his attention successively to the muscular fibre, its composition and vital powers; to the bones, their constituent principles, their evolution during three successive periods in the greater part of animals, and during two in the rest, the structure of their cavities and sinuses; in birds, with whom air circulates in these receptacles; in the horned mammalia, &c.; to the reproduction and decay of certain parts of the osseous system, which present phenomena analogous to those which take place in necrosis; to the shells of testaceous animals, to the bones of the cuttle-fish, &c.

He next considers the different species of articulations, distinguishing those which are found in various classes of animals, though not in man; such as the talons of beasts of prey, the joints by which the shells of the testacea are linked together, &c. From these he passes to the examination of the organs intermediate between the muscles and the bones, namely, the tendons; explaining their peculiar organization in the crustacea and insects, the manner in which they are connected with the fleshy fibres, their habitudes, &c. He concludes with general observations on the skeleton, on the three principal divisions of which it consists, and on the different degrees of perfection by which each is distinguished in the different species.

In the particular examination of the bones and muscles, these organs are collectively described in each of the different regions. This method, though defective when applied to the anatomy of the human body, has its advantages in treating concerning animals of which we possess only a superficial knowledge, and with regard to which any minuteness of detail would be superfluous.

The spine is first considered in the different classes. In the mammalia are examined the bulk and form of the vertebræ in
all

all the different regions ; their number in the dorsal, lumbar, sacral, and coccygeal regions, in which it varies, whilst in the cervical it is uniform ; with a table of the lengths of each of these regions in birds, reptiles, fishes ; several comparative tables of the same bones, each accompanied with a particular description of the muscles, noticing the similitudes in the form and position of these organs, and in their functions. These are the principal divisions under which the description of the spinal column is arranged. The order is nearly the same in all the different regions ; but we shall not follow the author, for, as has already been observed, his descriptions do not admit of abridgment : we shall only remark, that they are every where accompanied with philosophical observations on the relations which subsist between the bones and the muscles, between the organs, the habitudes, and food of animals, &c. ; and on the diversities in the length and figure of the different parts.

The examination of the locomotive organs is attended with greater difficulties in animals with white blood than in those with red, as fewer general relations subsist between them ; so that we are frequently under the necessity, after having divided them into families, to select one or two species from each, and to describe these separately. Monographies are indispensably necessary in this numerous division of the animal kingdom, and of such the author has frequently availed himself.

The treatise on the locomotive organs concludes with a consideration of these organs in the state of action, with the history of the position upon two feet with the body vertical, as in man, upon two feet with the body not vertical, as in birds, upon four feet, as in the mammalia ; of walking, whether upon two feet or upon four ; of leaping, swimming, flying. These different functions are particularly investigated in the animals that have vertebræ ; in those without vertebræ, they have been attended to in treating of the organs themselves.

The description of the organs of sensation, with which the second volume commences, is preceded by an examination of the head, considered as the receptacle of the different organs of the senses. The author treats of the cranium; of its proportions to the face, particularly in the vertical section; of the remarkable dimensions of the facial angle, as observed in the different divisions of the series of animals. He next examines the two divisions of the head separately; in the cranium, the number, connexion, and figure of the bones, the eminences and cavities of its interior part; the consideration of which points out, as it were, *à priori*, what shall be the form of the medullary organ, which it is destined to contain; the perforations in the base of the cranium, which in like manner indicate the disposition of the nervous system; in the face, the number, figure, and disposition of the bones, and the various foramina, which serve to transmit nerves to the external parts, or vessels to the internal. It is interesting to observe the diversities in the form and size of these parts, as examined in the mammalia, in birds, reptiles, or fishes.

From these observations on the receptacles of the organs requisite to sensation, a transition is made to the description of the nervous system. First are considered in general its organization, the relations which subsist between its different divisions, the texture of the brain, the spinal marrow, the nerves and ganglions, their origin and termination. This system is next considered in a state of action, as propagating or receiving sensitive influence, as the seat of the various sympathies, and as giving rise to the different intellectual phenomena: finally, it is compared in the various tribes of animals, where one of its parts is invariably to be found; namely, the tubercle, which in man is represented by the cerebellum; whilst its other parts are subject to an infinite variety of modifications in the different species of animated beings.

Mr. Cuvier commences his particular examination of the nervous system with the consideration of the human brain, in describing

describing which he follows a method different from that pursued by other anatomists. He next directs his attention to the brain of the mammalia; its proportion to the bulk of the body, to the cerebellum, and medulla oblongata; its form, circumvallations, the evolution of its interior parts, the disposition of its base, and the origin of the nerves, are successively examined: the same subjects are afterwards investigated in birds, reptiles, and fishes; and the numerous peculiarities found in these classes are separately noticed.

(To be concluded next month.)

ART. XI. *Considerations regarding pulmonary Consumption.* By THOMAS SUTTON, M. D. Member of the Royal College of Physicians, and Physician to the Forces. Octavo. 120 pages. ROBINSONS, London. 1800. Price 3s.

WRITERS on phthisis pulmonalis have frequently observed, that it sometimes takes its rise from affections of the stomach and bowels; and on dissecting the bodies of persons who have died of the disease, the glands of the mesentery have generally been found hardened and enlarged. In these cases, if the complaint in the bowels had not been noticed, or the cough, dyspnœa, and purulent discharge from the lungs had been remarkable, the disease was supposed to have been transferred from the lungs to these glands, or that these glands became affected through sympathy with the lungs. In a case that came under the care of our author, which, from the vicinity of the patient, he had more than usual opportunities of attending to, the origin of the disease from an affection of the abdomen was clear and obvious. The patient, a young woman, soon after lying-in, was troubled with pain in the bowels, attended with diarrhœa, which, continuing a few weeks, occasioned considerable loss of strength and wasting of the flesh. To these at length supervened a cough, hectic fever,

sweats, and all the usual symptoms of confirmed pulmonary consumption, of which she died. As the cough and expectoration were never considerable, the loss of strength, wasting, and at length death of the patient, could not, the author says, be attributed to those causes: neither could they be caused, he presumes, by the hectic fever and sweats, as she was much wasted before those symptoms commenced. Persons bear the repetitions of intermittents for many weeks, and even months, in which the degree of heat and subsequent perspiration are equal, or often exceed those attending hectic fever, not only without suffering an equal waste of strength and flesh, but without very material injury to the future health. Patients in what is called pulmonary consumption, the author also observes, frequently enjoy a good appetite, and continue to take an abundant portion of food to a late stage, and often to the last period of the disease. Contemplating these circumstances, he was induced to refer the wasting, hectic fever, and ultimately the death of the patient, to an obstruction to the course of the chyle through the glands of the mesentery. Further observations have led him to believe this obstruction in the glands of the mesentery impeding the passage of the chyle, if not the sole, is the most usual cause of that species of consumption in which tubercles are found in the lungs; and that the affection of the lungs does not exist in the beginning of the disease, but is occasioned by sympathy with those glands. Under this view of the complaint, the first and principal curative indication is, to resolve those obstructions. This, if early undertaken, may generally be effected, the author thinks, by partial or universal bleeding; by clearing the bowels of saburra choking the mouths of the lacteals, with calomel or other active purges, but principally by means of emetics, repeated twice, thrice, or oftener in the week; by riding on horseback, sailing, swinging, &c. The author supports his mode of reasoning both as to the cause and method of treating the disease, by quotations from the works of Sydenham,

Morton, Cullen, by a small work written by Dr. Simmons, and by a later work of Dr. Reid, on the subject. The author thinks his opinion is further strengthened by an observation made on the effects of pregnancy, which, it is known, frequently suspends, and sometimes cures consumption. This is effected, he says, by the proneness to vomit accompanying that state during the first three or four months, and sometimes through the whole of this term.

Although we may not exactly agree in every point with the author, in his opinion of the nature of phthisis pulmonalis, yet we cannot help thinking more attention should be paid to the state of the abdominal viscera in this complaint than is usually done; and that the method of cure recommended by him is more rational and more likely to be efficacious than the palliative method usually adopted, or than the empirical practice now so much in vogue.

When the disease is far advanced, there will generally be little room for bleeding or purging; but the vomits, riding, &c. may be persisted in. Balsamics and anodynes are not intended by the author to be excluded, the occasional use of them, to take off irritation, often proving highly beneficial.

ART. XII. *A Manual of a Course of Chemistry; or, a Series of Experiments and Illustrations necessary to form a complete Course of that Science.* By J. B. BOUILLON LAGRANGE, Professor in the Central Schools of Paris, and in the School of Pharmacy; Member of the Philomatic Society, and of the Medical Societies of Paris and Brussels, &c. &c. Illustrated with seventeen Plates. Translated from the French. To which is added, an Appendix, by the Translator. Two volumes, Octavo. CUTHELL, London. 1800. Price 18s.

THIS valuable work was originally undertaken for the use of the author's pupils in the Polytechnic School; and contains

tains a complete methodical summary, adapted to the aid of students in general, who may wish to repeat the chemical experiments of Fourcroy, Guyton, &c. The number of lessons or separate instructions here presented to us amount to threescore, which are distributed according to the method recommended by Fourcroy.

The reader will here find a detail of various new experiments that have never before been described in any elementary treatise; and, at the conclusion, there is a convenient table of the symbols adopted by the French chemists. In one respect the present translation is superior to the original: as the plates in the latter are merely outlines, which, though capable of conveying a general idea of chemical instruments, are insufficient to exhibit their true form, connexion, and parts, in such a manner as to give them proper effect; this deficiency has been supplied by accurate and highly finished engravings, the work of an ingenious artist, whose productions stand unrivalled in their line, and who, by his extensive knowledge in mechanics as well as in chemistry, is eminently qualified for designing and engraving every kind of chemical and philosophical apparatus. Besides this improvement, two new plates, which are wanting in the original, have been added; one of them contains the chemical characters adopted by the French chemists; and the other, two different articles of chemical apparatus, necessary to illustrate the descriptions given of them by the author.

At the end of the second volume the translator has subjoined a few notes and tables; which, to students of chemistry, may perhaps not be unacceptable.

The reader will observe, that the weights and measures are given according to the old French standard, except where otherwise mentioned; but by the tables in the appendix they may be easily reduced to the English standard.

Upon the whole, we strongly recommend the present work to all amateurs of chemistry, as one of the most useful and scientific

scientific publications of its kind ; in particular, we think, it may be consulted with the greatest advantage by persons concerned in those branches of art or manufacture to which chemical knowledge is peculiarly applicable.

ART. XIII. *The Medical and Chirurgical Pharmacopœia, for the Use of Hospitals, Dispensaries, &c.* By RICHARD REECE, Chepstow, Member of the Royal College of Surgeons in London, and the Medical Society of St. Bartholomew's Hospital, and late domestic Surgeon and Apothecary to the General Infirmary at Hereford. Octavo. 88 pages. WEST and HUGHES, London. 1800. Price 3s. 6d.

THE principal view of this publication is to instruct practitioners in the use of some cheap preparations from indigenous productions, which, the author says, are of equal efficacy with more expensive foreign medicines. They are particularly intended to be used in hospitals and dispensaries, which may thence be enabled to extend their benefits to a much greater number of the sick, without materially adding to their present subscriptions. As the simples used in the compositions are generally known, the author has not thought it necessary to swell the size of his book by inserting a catalogue of them. The preparations are ranged alphabetically, beginning with aquæ distillatæ, for which waters prepared with the essential oils are universally substituted ; then boli, cataplasmata, cerata, &c. We shall subjoin a few of the substitutes, with the author's observations on them.

“ *Decoct. Helleb. alb.*

“ R Rad. helleb. alb. cont. ℥ij. Coque aquæ puræ lbij, ad lbij, Dein adde Ammon. muriat. ℥ij.

“ This decoction has been very successfully employed as a lotion for the cure of tinea capitis, lepra, and itch. It is exempt from the great objections to the sulphuric and mercurial preparations, and equally effectual.

“ *Decoct.*

“ *Decoct. Querc. comp.*

“ R Cort. querc. cont. ʒj, Cort. salic. fragil. cont. ʒij;
Coque aquæ puræ lbiv ad lbij.

“ The bitter of the willow bark, conjoined with the astringency of the oak, forms a tonic medicine, which experience warrants me in asserting to be equal in efficacy to the cinchona. It has been retained on the stomach after the Peruvian bark has been rejected. In intermittents it has uniformly answered as well, and in all cases where the use of a tonic is indicated, it may with equal advantage be employed; a fact that may be turned to a very considerable decrease of expense in the medical department of hospitals, &c.

“ *Decoct. Ulmi.*

R Cort. ulmi inter. contus. lbß. Coque aquæ puræ lbviii;
ad lb v.

“ This affords a good vehicle for the exhibition of antimonial wine, or solution of muriated quicksilver, in cutaneous affections. It is not, perhaps, inferior to the expensive root, sarsaparilla.”

The author sometimes gives the reputed virtues of his preparations, as in the following:

“ *Pilul. Zinc. vitriol.*

“ R Zinci vitr. ʒj, Pulv. rhei Ind. ʒß, Ext. gentian. ʒj. M. Cap. gⁱ x bis ter die.

“ Hysteria, epilepsia, leucorrhœa, et blenorrhœa.”

The above may serve as specimens of the work, which contains nothing, we think, but what was well known before; and the reflections, or observations of the author, do not add much to the value of it. His opinion, that a mixture of oak and willow bark makes a medicine of equal efficacy with the cinchona, is, we are afraid, unfounded, although it may, in some cases perhaps, be used advantageously. Two indexes are added, the first of succedanea recommended by the author, the second of diseases; under each of which are given titles of the medicines proper to be used in their cure: as for example:

“ *Ascarides.*

- “ *Ascarides*.—Pulv. tanaceti comp. Pulv. jalapii comp.—
 Inf. Spigeliæ. Inf. gent. comp.—Enema foetid.
- “ *Asthma*.—Mist. ex allio foetid. Mist. foetid. comp. Mist.
 foetid. comp. anod. Pil. ex allio. Pil. scillæ anod. Mist.
 cicutæ. Haust. zinci vitriol. Tinct. digitalis. Haust. an-
 tim. tart. scillit. Oxym. ex allio comp.
- “ *Apostema*.—Applic.—Fot. absinth. Catapl. terebinth. Empl.
 euphorb. Lin. ammon. fort. Calx cum kali puro.—Cap.
 Mist. quercus comp. vitr. Pil. opiat.”

We scarcely need to add, that the manner of making the several preparations is found under their respective heads.

ART. XIV. *The Physicians' portable Library; or, Compendium of the modern Practice of Physic: in which the Causes, Symptoms, and Treatment of all the Diseases incident to the human Body are clearly and fully delivered; together with the Virtues, Doses, and proper Exhibition of all the medicinal Simples and Compositions directed in the last London and Edinburgh Pharmacopœias. To which are added, Tables of the new Names adopted by each College, and of their Reference to those formerly in Use.* By BRABAZON SMITH, M.D. Small octavo. 256 pages. MATTHEWS, London. 1800. Price 5s.

THE author professes to give a short account of diseases, with the most approved methods of treating them; also a complete Pharmacopœia, containing the whole of the London, and such medicines from the Edinburgh Pharmacopœia as are not contained in the London; or both of them, where the preparation varies so much as to make the insertion of them necessary. The whole is arranged in alphabetical order, in the manner of a dictionary.

“ The utility of such a work,” the author says, “ it is presumed, will be sufficiently obvious to countenance its publication; for, however inadequate to convey instruction to the

elder branch of the profession, they will probably experience a favourable reception from the young practitioner, and may, on some occasions, be advantageously had recourse to even by the veteran."

We confess we are of a very different opinion from that here expressed, thinking such compendiums to be so far from useful, that they are likely to prove extremely injurious to young physicians, or students in physic, tending to divert their attention from studying original treatises, from which alone they may hope to attain a true knowledge of diseases, or of the reasons on which their practice should be founded. On the other hand, it is to be feared, the slight sketches here given may tend to increase the number of pseudo-practitioners, who may just glean enough from them to increase their presumption, and make them more boldly undertake what they are by no means qualified by their education to perform.

The following may serve as specimens of the manner in which the work is executed.

“ **CHOLERA.** A vomiting and purging of bilious matter, attended with violent pain, griping, and flatulency; thirst, heat, anxiety, pulse quick and unequal;—coldness of the extremities, clammy sweats and syncope coming on, quickly put a period to the patient's life. This disease is chiefly prevalent in summer and autumn; but in very warm climates it may arise at any season. Hence it appears to be produced by a warm atmosphere exciting a more copious secretion of bile, by rendering it more acrid, or disposing it to pass off in larger quantity than usual: though the pulse and respiration are both hurried and irregular, yet symptoms of pyrexia seldom occur.

An evacuation of the redundant bile should be favoured by the plentiful exhibition of mild diluents, (administered by the mouth and also by injection,) particularly chicken broth, to the extent of five or six quarts, drank as quickly as possible. If the vomiting continues, or the patient's strength

strength declines, give the saline draught, or an infusion of oat bread, toasted brown, in water : should these not immediately succeed, prescribe opiates either by the mouth or injection, and continue their use till the danger of relapse is past : after this the tone of the system may be restored by Peruvian bark, or columbo root, given from half a drachm to a drachm every two, four, or six hours.

“ CHOREA. Spasmodic or convulsive motions of the legs, arms, and head, generally affecting one side only, accompanied with inarticulate speech, lolling out of the tongue, and in walking a ridiculous dragging of one leg after the other, as if the whole limb was paralytic. A variety of antic gesticulations take place, and the mind is often affected with some degree of fatuity. This disease generally makes its appearance before the age of puberty, and rarely continues beyond that period.

In some plethoric habits bleeding may be practised, but it is seldom necessary, and often hurtful. The chief remedies to be depended on are, cold bathing, tonics, and antispasmodics ; in some instances electricity has been tried and found serviceable.

“ CICUTA, *herba, flos, semen* (L. E.) Deobstruent, alterative, narcotic ; two or three grains daily of the powder, gradually increasing the dose. Used externally in fomentations and poultices as a discutient and resolvent. Recommended in cancer. See *Succus spissatus Cicutæ*.

“ CINARA, *folium* (L. E.) Diuretic. Half an ounce to an ounce of the expressed juice morning and evening, in an equal quantity of white wine, is much extolled in dropsy.

“ CINCHONA, *cortex* (L.) Tonic, astringent, antiseptic, stomachic ; a scruple to a drachm several times a day ; if it occasions nausea, or uneasiness in the stomach or bowels, add ginger or other aromatic ; if purging, a few drops tincture of opium.

“ CINNAMOMUM, *cortex* (L. E.) Astringent, stimulant, aromatic ; five grains to fifteen.”

The term *cow-pox* is not found in the volume, although at present this subject is so much under discussion.

ART. XV. *Essai de Statistique ; i. e. A statistical Essay*. By J. A. MORGUE. Paris. 1800.

THIS essay contains a series of observations on the births, marriages, and deaths which have taken place among the inhabitants of Montpellier during twenty-one years, from the year 1772 to 1792 inclusive, and the calculations of the probabilities of life resulting from them. There are also registers of the barometer and thermometer.

The probable duration of life is here put in a number of new and interesting points of view, illustrated by tables apparently accurate. From the author's account, the southern parts of France appear particularly congenial to the prolongation of human life after a certain period, as a large proportion of inhabitants appear to have survived seventy and eighty years. The case is otherwise with children, a great proportion of whom perish early. This, however, is probably occasioned by their parents' neglect ; especially from neglect caused by attention to rearing of silk-worms, as is proved by the common observation, “ que le tems auquel on eleve les vers à soie est le tems auquel on peuple le plus le paradise.” Children will always abound in proportion to the care parents can afford to bestow upon them ; or, what is the same, in proportion to the facility of procuring food.

The author finds, that the largest proportion of all ages die in the autumnal quarter of the year : this he attributes to the diminution of oxygen, by the dying and withering of plants : we should be rather inclined to think it owing to the diminution of the stimulus of heat.

In this work the political economist will find a variety of uncommon and useful observations on the comparative value of life.

MEDICAL CORRESPONDENCE.

(Communications for this department will be gratefully received.)

Art. 16. *On an improved Treatment of Fevers.* Communicated to the Editors by Dr. DOMEIER.

DR. Reich, well known by several useful publications, practised medicine at Erlangen, and was uncommonly successful in treating fevers by a method peculiar to himself. The novelty and success of his treatment made him known to the government of Prussia, and he was sent for to Berlin, to repeat his experiments at the hospital there (Charité,) under the inspection of Drs. Selle, Fritze, Formey, and Richter, who were named by the ministers of state for that purpose.

This committee of physicians selected the patients for trial, and were particularly careful that no other medicine should be given at the same time.

After a sufficient number of trials, the committee were so well satisfied with his success, and made so favourable a report to the King, that he rewarded Dr. R. with an annuity for life, and a professorship at the university of Erlangen, upon condition of publishing his ideas on the nature of fever, as well as the remedy he employed, which hitherto he had kept a secret. He has fulfilled this engagement in a dissertation, entitled, “*Vom Fieber und dessen Behandlung Uberhaupt.*” Berlin, 1800.” In which he has developed his views of the nature of fevers, and his treatment founded upon them. A few of the most essential points of this ingenious work I will now lay before the reader.

All actions of our body, be they functions, secretions, or excretions, are the effect of chemical processes, in which we
perceive

perceive a continual change effected in the mixture of its component parts*. The causes of these different chemical processes consist in the addition, change, and secretion of many matters, as well in respect to quality as to quantity, and in the difference of the particular organs in which the process is performed.

The construction of our body being a chemical production, its qualities, as sensibility, excitability, irritability, &c. must likewise depend upon chemical mixture; and not only all the actions of the fluid parts of our body are determined by chemical processes, but also the solid ones can be reduced to fluids, because their actions and qualities depend upon them. Under the word fluid are likewise included gazes, with the electric and galvanic fluids.

* As this idea, and some following, of this illustrious author agree so perfectly well with a few ideas of mine, in a paper on the furred tongue lately published, I beg leave to arrest the reader's attention one moment, in consequence of a note inserted by one of the editors of the Medical and Physical Journal (Vide N^o XXI. of that work,) which charges me with having reasoned on Boerhaavian principles, (he calls it *humorial pathology*,) and consequently, as he infers, on paltry and weak grounds. I am not so arrogant as to condemn a mode of reasoning because it happened to be Boerhaave's, or because it was issued half a century ago. I leave that to those writers who think nothing valuable but what is new, merely because it is new; and who take a pleasure in worrying the fame of Boerhaave, as curs delight in barking at the moon. Without intending to vindicate or condemn the system of that great man, I have to observe, that this editor has totally mistaken his principles of pathology, when he hints that I have reasoned from them. The learned reader will discover the futility of such a charge, and he will agree with me in thinking, that a critic, when he wishes to display his erudition, should be careful of the blunders of memory; and that he should refute before he condemns, doing both with modesty and candour. A contrary procedure belongs only to the pert and ignorant;—men who are little disposed to learn any thing of other persons; still less to study the principles of Dr. Boerhaave; and least of all, to profit by the dignified diffidence, humility, and candour which are every where conspicuous in that great man's writings.

All changes of the galvanic body depend, therefore, upon the change of its chemical qualities; even the faculties of the mind depend upon them.

The two principal chemical processes are respiration and digestion. The first is the most simple.

That the nerves do not secrete any fluid, but serve only as conductors, galvanism shews clearly enough. As long as the chemical affinities are modified in such a manner that there is an exact proportion amongst the several functions of the body, we call it healthy. The contrary produces the diseased state.

The secretions being secondary consequences of the process of nutrition, they must more or less be diseased as soon as digestion becomes imperfect. That this is really the case, we see clearly in fevers, where both the secretions and excretions are changed, each of them containing more or less of one of their products than they ought to do. Whoever observes with exactness the urine, fæces, matter of perspiration, breath, blood, bile, &c. can have no doubt that these appearances are only to be explained by chemical laws.

The state of fever, therefore, only differs from a state of good health by the secretions and excretions being so much changed, that a general disproportion exists among them. If the sound state consists in the general equipoise of the constituent parts of the body, fever consists in the contrary; some matters are separated, others are united, neither of which should be the case. As the word fever shews a particular form of disease, all diseases which bear this name must agree one with another in one general, essential, and distinguished point; this never must be wanting, otherwise it would be no fever. It must likewise be something common to all the different species, otherwise they could not go under the same denomination. This may be called the generical character, without which no disease can be a fever. For logic informs us, that what belongs to the genus must likewise belong to the species.

The

The generical character of fevers consists in a general preternatural* separation and reunion of the simplest matter of the body, caused by an absolute or relative, local or general, diminution of oxygen. This may be produced by external or by internal causes. Amongst the external ones, we may reckon an inferior standard of the atmosphere, and diseases of the skin, by which the just proportion of the oxygen to the other matter is lessened.

In the sound state of the body there is an uninterrupted train of animal chemical processes, which commence and accomplish their several actions every moment; whatever disturbs them causes preternatural separations or reunions, or, in other words, a fever. It may be effected likewise by internal causes, which are already in the body, or which may be conveyed into it; as in all animal chemical processes the solid parts, as muscles, nerves, vessels, &c. have their influence, any power which disturbs their actions may produce fever, but the change it produces is of a chemical nature. In this manner every impression of the mind may cause a fever.

The most immediate cause of all fevers is either the prevented reception of oxygen, or the too great effusion of it, or the excessive accumulation of azote, hydrogen, carbon, sulphur, phosphorus, and all those matters we look upon as simple ones. According as the one or the other of these matters are more developed, or according to the seat where they are developed, or according to the degree of their reunion, and according to the excitability and action caused by them, we see different symptoms of fever, and give to them appropriate names. If we denominate the state of our body feverish; the *conditio sine qua non* is, that the proportion of oxygen to the other matters is inadequate, and that one of these, or all together, exist in a greater quantity than they ought to be.

* The word preternatural is not introduced here, as if something happened which was against the laws of the animal economy, but only to shew the relation to the sound state.

Every fever may, therefore, effectually be cured by supplying the want of oxygen, as long as the body has not lost its excitability to restore the proportion; that is to say, as long as the restoration of the proper proportion is not rendered impossible by the destruction of one of the organs, and if the living animal chemical processes do not approach too near to the dead animal chemical processes.

It is for that reason that oxygen is the only sure remedy against fevers: though their origin may be different, their nature is the same; for the diseased state always depends upon want of oxygen, either absolute or relative. Not being able to procure the oxygen by itself, we must give substances which contain it in the greatest quantity, and in the purest and simplest way,—and such are acids. The more oxygen in proportion to its basis the acid contains, the more it is fit for the cure of fevers. This is the reason why mineral acids are preferable to any other substance. Each union of an acid with any other body, be it water, gas, or metal, is a process of combustion, and no combustion can be performed without the union of oxygen with the matter which is to be burned; therefore the objection, that the oxygen is too strongly united with the basis to part from it, is ill founded. But that the union of an acid with any other matter is really a process of combustion, we see by the destruction of vegetable and animal matter after the union of an acid.

The stronger the acid, the more perfect is the combustion.

The acid must always part from some of its oxygen after it has been conveyed into the body, because it unites with matters it finds there.

The acids cannot be hurtful in developing caloric, because when that happens the caloric unites greedily with the matter which had been previously deprived of its own by the union of the acid.

All objections to this pure chemical theory, in applying it to the body, must disappear; as by experience we see that the

cure of fevers depends upon the recovery of the just proportion of the oxygen to the other matters, and that the cure with acids is much quicker than with any other empirical remedy.

The natural inclination of fever-patients to acids easily excites also the idea of the utility of them in the cure of this disease.

The subsultus tendinum, the hickup, the picking of bed-clothes, and the catching flies, are galvanical convulsions, and originate generally from the disproportion of other matters to the oxygen, in which case the proposed remedy is more clearly indicated.

The symptom of the swelled belly proceeds from different gases; and the muriatic acid in form of gas easily uniting with other gases, and the known good effect of the empirical employment of acetous clysters, leads easily to the idea of the good effect of muriatic acid in the form of clysters: and in fact, administering it to forty drops in each clyster is of the greatest use.

The divisions of the ancient systems of fever into acute, remittent, intermittent, simple, complicated, idiopathic, sympathetic, symptomatic, original, accessory, inflammatory, putrid, slimy, bilious, nervous, exanthematic, epidemical, low, contagious, &c. can make no difference. As long as no organ is injured, and no other fault committed, the danger will, by means of this remedy, be soon removed.

The muriatic acid is preferable to the sulphuric, as it is more volatile. Being in the form of salt, one of our principal necessities of life, a substance eagerly licked by animals, and so profuse in nature, it is singular we should not have been long ago attentive to it as a remedy. Experience supports this conclusion, in giving the preference to muriatic acid. And the objection, that muriatic acid has not yet been decomposed, cannot be maintained; for we know that neither sea-salt nor muriatic acid goes from us as a substance.

Other

Other acids have been tried, but the success is not equally good. The phosphoric acid proved the least useful. The nitric acid was crowned with success in dysenteries and lingering diarrhoeas. But the hyperoxygenated muriatic acid is a very efficacious, pleasant, cheap remedy, and especially to be recommended when the remedy is required to part quickly from its oxygen, viz. in the soporous state of fevers. However, in general its effect is not equal to that of muriatic acid. The great quantity of hydrogen and carbon which vegetable acids contain, is the cause that they are not equally beneficial. The most efficacious way to give them is by the stomach; next to this, in clysters. They prove also successful when applied to the skin in baths, and in embrocations. It is understood, that in the last case the remedy must be likewise diluted.

The medicines hitherto used in fevers removed them also by the quantity of oxygen they contain. Fourcroy found a great deal of it in the bark. Camphor contains a vast quantity of oxygen: even opium contains it, as one may judge from its milky origin. Sometimes even those remedies which contain in themselves no oxygen, may prove useful in the cure of fevers, so far as they have a stronger affinity to those matters with which oxygen is united, and thereby render it free. This is the way in which volatile remedies act, which may be given in the last period with success only, to produce another modification of organic powers. The said remedies do not render entirely useless the aid of emetics, purgatives, and clysters, which likewise may be given from proper indications. Baths may be of use for either deriving or conveying heat, according to their degree of warmth, thereby reducing the necessary parts to their due proportion; and their efficacy may be augmented by acids. The quantity of acids necessary for a cure depends on circumstances, and can only be determined by the success. It is better to begin with small doses, and to repeat them often; for instance, one drachm to half an ounce, in

eight ounces of water, and with one ounce of syrup. Let the patient take of this, every hour or two hours, a table-spoonful or more. If it be sour, the patient may drink a little water after it. But in time of danger, from forty to an hundred drops may be given at once, and this frequently repeated.

The hyperoxygenated muriatic acid is to be taken in great quantities, viz. from one to two ounces every hour; or, in more urgent cases, every half hour. Patients have taken twelve ounces within four hours! No inconvenience proceeded from it, but a few stools.

Should the strength of the acid be doubtful, we have only to augment the doses of it till its good effect is experienced.

On account of correcting the taste, it is proper to mix some syrup with it. If the remedy be not sufficiently diluted, it makes the mouth sore, but it will in a great measure lose its effect if too much diluted.

There is no fear of excoriating the stomach; for we eat horse-radish, red pepper, mustard, &c. without experiencing this mischief, though they will raise blisters upon the skin. The acid goes already diluted into the stomach, and finds there fluids and gaseous matters with which it must soon undergo a neutralization, long before it can unite with the carbon of the substance of the stomach.

In dangerous cases, after the acids are administered, eructations, and voiding of wind, very frequently occur. We may look upon the following signs as favourable: noise in the belly, diarrhœa, rising of the pulse, change in the temperature of the patient, sweat, salivation, augmented secretion of urine, more quietness and sleep, &c.: the best sign of all is, when patients recover their lost senses and remain sensible, begin to sleep, and their pulse becomes lower, quiet, and moderately full. Fatal signs, on the contrary, are, petechiæ in the face; when one eye is half open and the other paralytically shut, if the cornea, after the remedies are given, first becomes clearer and afterwards cloudy; if the patient recovers
his

his senses and again loses them, when he gets an hippocratic face; if the rattling in the throat augments; if the pulse becomes intermittent, unequal, and sinking.

As soon as the fever is cured by a sufficient quantity of acid, no other remedy is wanted afterwards but a nourishing diet.

The advantages of this new discovery may be brought under the following heads:

1. The healing art gets by it a new, sure, and solid foundation, upon which present and future physicians may erect a better hypothesis.

2. Fever-patients are now considered in a juster point of view: they are consequently cured quicker, and in a more advantageous proportion, and almost without exception, provided no organ necessary for life is injured; and this cure does away all dangerous and unpleasant symptoms.

3. Many diseases which have hitherto been looked upon as incurable, or as dangerous in the highest degree, and which very seldom have been cured, and that only in an empirical way, will now be successfully treated; viz. plague, rabies canina, the fever which accompanies consumption, yellow fever, low fever, &c.

A very good way to give it in consumptive cases, is in spirits of wine.

4. All epidemical, putrid, nervous, camp, prison fevers and dysenteries, which are fatal to many thousands, will now be cured easily and safely, and in a very cheap and simple way. The remedy ought not to be discontinued in case it should purge, for this is rather a favourable symptom.

5. Physicians to armies may prevent epidemical fevers, by giving acids to the men, in bad weather, after great fatigues, or under other unfavourable circumstances.

6. To cure very fatal diseases in children, of an epidemical nature, viz. small-pox, measles, scarlet fever, and chin-cough.

7. Altogether to lessen the mortality of children, which attaches

attaches no little blame to ill treatment ; especially where alkalies and absorbents are given, which augment the disease, there being scarcely one in a hundred who really has acids in the stomach, and yet all have been treated as such. It is much oftener a rancid acrimony and gases. Thus carbonic acid is formed in the stomach, from which caloric is often developed, which causes the heartburn. The use of alkalies, if any, can therefore only be to imbibe the carbonic acid. Mineral acids prove, under these circumstances, surprisingly successful. The best way to give them is with syrups.

8. Upon the treatment of some diseases, though not febrile ones, it will have a happy influence.

9. All these advantages can be got in a very cheap way, and in a shorter time, so that we need not now bring expensive remedies from other countries.

Conduit Street,

W. DOMEIER.

December 26th, 1800.

Art. 17. An exact Copy of the Charter of the Royal College of Surgeons in London, dated March 22d, 1800.

GEORGE the Third, by the grace of God, of Great Britain, France, and Ireland, King, Defender of the Faith, &c. To all to whom these presents shall come : Whereas our royal predecessor, King Edward IV. by certain letters patent, under the great seal of England, bearing date the 24th day of February, in the first year of his reign, did, at the supplication of the freemen of the mystery of Barbers of the city of London, using the mystery or faculty of surgery, grant to them, among other things, that the said mystery, and all the men of the same mystery of the said city, should be one body and perpetual community, and that two principals of the same commonalty, of the most expert men in the mystery of surgery, might, with the assent of twelve or eight persons at the least, of

of the same community, every year elect and make out of the community, two masters or governors, being the most expert in the mystery of surgery, to oversee, rule, and govern the mystery and commonalty aforesaid :

And whereas by an act of parliament made and passed in the thirty-second year of the late King Henry VIII. entitled for Barbers and Surgeons, after reciting, that within the city of London there were then two several and distinct companies of Surgeons, occupying and exercising the faculty of surgery, one company called the Barbers of London, and the other company called the Surgeons of London ; it was thereby enacted, that the said two several and distinct companies of surgeons should from henceforth be united, and made one entire and whole body corporate, and one commonalty perpetual, which at all times thereafter shall be called by the name of the Masters or Governors of the Mystery and Commonalty of the Barbers and Surgeons of London ; and by the same name to implead and be impleaded before all manner of justices, in all courts, and in all manner of suits :

And whereas in and by certain letters patent, under the great seal of England, bearing date the 15th day of August, in the fifth year of the reign of his late Majesty King Charles I. reciting, that the men of the same companies enjoyed divers liberties and franchises within the city of London, the suburbs and liberties thereof, by virtue of divers acts of parliament, and divers charters and letters patent, his said Majesty did grant and confirm unto the said masters and governors of the mystery and commonalty aforesaid, and their successors, all and singular the manors, messuages, lands, tenements, customs, liberties, franchises, immunities, jurisdictions, and hereditaments whatsoever, which the men of the said companies then held, used, and enjoyed, by any lawful means or title whatsoever : and his said late Majesty did thereby give power to the said corporation to make annual elections of masters or governors of the said commonalty, whereof two to be professors

fessors in the art and science of surgery; and also to elect and constitute ten of the freemen of the said society to be examiners of surgeons in London:

And whereas by an act of parliament made and passed in the eighteenth year of the reign of our late royal grandfather, King George II. entitled, “An Act for making the Surgeons of London, and the Barbers of London, two separate and distinct Corporations,” it was enacted, that the said union and incorporation of the Barbers and Surgeons of London, made and effected by the aforesaid act of the thirty-second year of King Henry VIII. should, from and after the 24th day of June 1745, be dissolved, and declared void and of no effect; and that such of the members of the said united company who were freemen of the said company, and admitted and approved surgeons, within the rules of the said company, and their successors, should from thenceforth be made, and they were thereby made and constituted, a separate and distinct body corporate and commonalty perpetual, which at all times thereafter were to be called by the name of Master, Governors, and Commonalty of the Art and Science of Surgeons of London, and by the same name might implead and be impleaded before all manner of justices, in all courts, and in all manner of actions and suits, and take to them and their successors, lands, tenements, rents, or hereditaments, not exceeding the yearly value of 200*l.* in the whole:

And whereas we are informed that the said Corporation of master, governors, and commonalty of the art and science of Surgeons of London, hath become and now is dissolved: and whereas it is of great consequence to the commonweal of this kingdom, that the art and science of surgery should be duly promoted: and whereas it appears to us, that the establishment of a college of surgeons will be expedient for the due promotion and encouragement of the study and practice of the said art and science: Now we, of our special grace and mere motion, and at the humble petition of James Earle, Esq. the late
master,

master, and divers other members of the aforesaid late Corporation of Surgeons; have willed, ordained, constituted, declared, given, and granted, and by these presents, for us, our heirs and successors, do will, ordain, constitute, and declare, give and grant, unto the aforesaid James Earle, and unto all the members of the said late Company or Corporation of master, governors, and commonalty of the art and science of Surgeons of London; having been admitted and approved surgeons within the rules of the said Company; and also unto all such person, who, upon or since the dissolution of the said Corporation, shall have obtained letters testimonial, under a seal purporting to be the seal of the said late dissolved Corporation, authorizing them to practise the art and science of surgery; that they, from henceforth for ever hereafter, shall be and remain, by virtue of these presents, one body corporate and politic, by the name of *The Royal College of Surgeons in London*, and by the same name shall and may have perpetual succession, and a common seal; with power to break, alter, and make anew, the said seal, from time to time, at their will and pleasure; and by the same name shall and may implead and be impleaded before all manner of justices, in all courts, and in all manner of actions and suits; and shall be at all times for ever hereafter persons, able and capable in law to take, purchase, possess, hold, and enjoy, and shall and may take, purchase, possess, hold, and enjoy, a hall or council-house, with its appurtenances, situate within the cities of London or Westminster, or within one mile of either of them, for the use and purposes of the said College; and also any other lands, tenements, rents, or hereditaments wheresoever situate, lying, and being; not exceeding, together with the aforesaid hall or council-house, and its appurtenances, the yearly value of one thousand pounds in the whole, without incurring any of the penalties in any statute of mortmain, or any thing in any statute of mortmain to the contrary notwithstanding.

And it is our further will and pleasure, that nothing in these

presents shall be construed to give the corporation of the city of London any power or jurisdiction over the said College hereby established and incorporated; and that no person, by virtue of these our letters patent, constituted or ordained, or hereafter to be admitted a member of the said College, shall be thereby entitled to any franchise belonging to the freemen of the city of London.

And it is our further will and pleasure, and we do hereby, so far as we lawfully can or may, grant and ordain, that the said Royal College of Surgeons hereby incorporated, shall and may exercise and enjoy all and singular other the gifts, grants, liberties, privileges, and immunities, possessions, real and personal, whatsoever and wheresoever, hereinbefore mentioned, or by any act or acts of parliament, or by any letters patent, of our royal predecessors, kings and queens of England, given, granted, and confirmed unto, or otherwise lawfully acquired by and belonging to the said late master, governors, and commonalty of the art and science of surgeons; or any of them, and not hereby altered, taken away, changed or abridged, made void or annulled*.

And

* The privileges which the members of the Corporation obtained at different times, from the first incorporation of the body by a charter, in the reign of King Edward IV. were, liberty to practise surgery, to the exclusion of unqualified persons; and the exemptions which were granted to them were from the offices of watch and ward, from juries and inquests, and the bearing of armour. These were granted at different periods, by charters of the 24th of February, first Edward IV.; 5th of December, fifteenth Henry VII.; 12th of March, third Henry VIII.; 31st of January, second James I.; and 15th of August, fifth Charles I.; and by acts of parliament of the fifth and thirty-second Henry VIII. and eighteenth George II.

But as all these rights and exemptions were fully confirmed and established by the act of the eighteenth George II. it is thought unnecessary to enumerate any of the earlier authorities; and that it will be sufficient to state, that by the act of the eighteenth George II. it was enacted, "That the Company of Surgeons, made and incorporated by that act, and

And it is our further will and pleasure, that the College of Surgeons hereby established, shall be liable to, and shall perform, such duties as the late dissolved Corporation of Surgeons was at any time heretofore liable to, and did perform, by virtue of an act made in the twenty-fifth year of the reign of our royal grandfather, King George II. entitled, “An Act for the better preventing the horrid Crime of Murder.”

And further we will, that the said College shall, and by these presents they are required to purchase or provide a proper room, house, or building, with suitable conveniences, within four hundred yards, at the farthest, from the usual place of execution for the county of Middlesex, or the city of London, and the suburbs thereof; for the purpose of more conveniently dissecting and anatomizing the bodies of such murderers as shall at any time hereafter be delivered to them, by virtue of the last mentioned act.

And it is our further will and pleasure, that it shall and may be lawful to and for the said College, hereby established and incorporated, from time to time, in the manner hereinafter mentioned, to elect, choose, and appoint twenty-one persons to be the court of assistants of the said College; of which court of assistants ten persons shall at all times be constituted and appointed examiners of surgeons for the said College; and of such ten

and their successors, and all such who then had been, or hereafter should be, examined and approved, pursuant to the rules of the said Company, should be entitled to practise freely and without restraint the art and science of surgery, throughout all and every his Majesty's dominions, any law or custom to the contrary notwithstanding.”—“And it was further enacted, that all and every the freemen of the said Corporation, and who had been, or thereafter should be, examined and approved, pursuant to the rules and orders of the said Company, and every of them, for so long time as they should use and exercise the art or science of surgery, and no longer, should and might, at all times thereafter, be freed and exempted from the several offices of constable, scavenger, overseer of the poor, and all other parish, ward, and leet offices; and of and from the being put into, or serving upon, any jury or inquest.”

persons one shall be principal master, and two others shall be governors, to be respectively qualified and admitted in such manner, and to continue in the said offices respectively for such time or times as by these our letters patent is hereinafter ordered and appointed. And it shall and may be lawful for the master and governors of the said College, or for one of them, together with ten or more of the members of the said court of assistants for the time being, when and as often as to any one of the master or governors shall seem meet, to hold courts and assemblies, in order to treat and consult about and concerning the rule, order, state, and government of the said College. And also that it shall and may be lawful to and for the said master and governors, and court of assistants, so assembled, or the major part of them, to make, ordain, confirm, annul, or revoke, from time to time, such bye-laws, ordinances, rules, and constitutions, as to them shall seem requisite and convenient, for the regulation, government, and advantage of the said College: so as such bye-laws, ordinances, rules, and constitutions be not contrary to law; and in all such cases as shall be necessary, be examined, approved of, and allowed, as by the laws and statutes of this realm is provided and required: and also to transact and ordain all such other matters and things as the master, governors, and court of assistants of the late dissolved Company or Corporation of the master, governors, and commonalty of the art and science of Surgeons of London, might heretofore lawfully do, transact, or ordain.

And further we will, that Charles Hawkins, Esq. one of our principal serjeant surgeons, shall be and he is hereby constituted and appointed the first master of the said College of Surgeons: and that William Long, and George Chandler, Esquires, shall be, and they are hereby constituted and appointed the first governors of the same: and that the said Charles Hawkins, William Long, and George Chandler, together with Joseph Warner, William Lucas, Samuel Howard, and William Cooper,

Cooper, Esquires, the said James Earle, Thomas Keate, Esq. the surgeon-general to our forces, and Charles Blicke, Esq. shall be, and they are hereby constituted and appointed the first examiners of surgeons for the said College. And also that the said Charles Hawkins, William Long, George Chandler, and Joseph Warner, Jonathan Wathen, Esq. the said William Lucas, Samuel Howard, William Cooper, James Earle, and Charles Blicke, Thompson Forster, Esq. John Birch, Esq. the said Thomas Keate, John Heaviside, John Howard, William Blizard, and Henry Cline, Esquires, David Dundas, Esq. the other of our principal serjeant surgeons, and such three other persons as shall be elected to that office on the day whereon the court of assistants of the said College, hereby incorporated, shall first meet, after the date of these our letters patent, or at a court of assistants to be holden within one month then next after, shall be, and they are hereby constituted the first court of assistants of the said College of Surgeons, hereby incorporated and established.

And it is our further will, that the said master and governors shall respectively hold and enjoy their said offices of master and governors from henceforth until the first Thursday in July next after the day of the date of these presents; and from thenceforth until a new election of a master and governors of the said Corporation shall take place, as is hereinafter expressed.

And we also will, that the said persons so before named and constituted examiners of surgeons of the said College, and their successors in that office duly chosen, nominated, or appointed, and that the said persons so before named and constituted assistants of the said College, established by these our letters patent, and their successors in that office, duly chosen, nominated, or appointed, shall respectively hold and enjoy their said offices during their natural lives, or until they shall be lawfully removed out of the said offices for any reasonable cause.

And

And it is our further will and pleasure, that the two principal serjeant surgeons to us, and to our heirs and successors, and the surgeon-general to our forces, and to the forces of our heirs and successors, if they or any of them, at the times of their appointments respectively, shall not be members of the courts of assistants and examiners of the said College, shall be from time to time admitted members of the said court of assistants, and also examiners of the said College hereby incorporated, when and so soon as any vacancy shall happen, from time to time, after the appointment of every such serjeant surgeon or surgeon-general respectively, in preference to all other persons.

And further it is our will and pleasure, that the master and governors of the said College, hereby incorporated and established, or one of them, together with the assistants of the said College, hereby nominated, or the major part of them, shall, within thirty days next after the date of these our letters patent, meet at such place at which the persons, members of the said late Corporation, shall have usually held their meetings, for the space of six months next before the day of the date of these presents, or at such other place within the cities of London or Westminster, or within one mile of either of those cities, as the master or governors, or any two of them, hereby constituted, shall in that behalf, by notice to be by them given and published in the London Gazette, fourteen days before the day of holding such meeting for that purpose, appoint; and shall then and there hold a court of assistants, for carrying into effect these our letters patent; and at such court the said master and governors, examiners and assistants, or such of them as shall be then present, shall administer unto each other respectively, and each of them shall take the respective oaths following; that is to say, the said master and governors shall take the following oath:—"You do swear, that, according to the best of your skill and knowledge, you will discharge the several trusts and powers vested in you as

master (or governor, as the case may be) of the Royal College of Surgeons in London; and that you will diligently maintain the honour and welfare of the said College; and in all things which shall in any sort concern your office, you will act faithfully and honestly, without favour or affection, prejudice or partiality, to any person or persons whomsoever.—So help you God.”

And that each of such examiners and assistants shall take the following oath, that is to say—“ You do swear, that, so long as you shall remain in the office of examiner (or assistant, as the case may be) of the Royal College of Surgeons in London, you will diligently maintain the honour and welfare of the said College; and in all things relating to your office, and with all manner of persons, act equally and impartially, according to the best of your skill and knowledge.—So help you God.”

And no person hereby appointed, or hereafter to be elected, master, governor, examiner, or assistant of the said College, hereby established and incorporated, shall proceed to act in the execution of such office, until he and they shall have taken the respective oath and oaths hereinbefore mentioned, which shall be duly administered to them respectively, at a court of assistants to be holden in pursuance of these our letters patent.

And we further will, that the master, governors, and assistants, for the time being, of the said College, hereby made and established, shall, upon the first Thursday in the month of July next after the date of these our letters patent, or within one month then after, and upon the first Thursday in July in every succeeding year, or within one month then after, meet in the place which shall from time to time be used, or appointed to be used as their hall or council-house, or as near to such hall or council-house as conveniently may be; and then and there elect, choose, and appoint out of the examiners, by the majority of votes of such of the court of assistants as shall
be

be then present, one person to be principal master, and two other persons to be governors of the said College for the then succeeding year; and then and there also in like manner choose or appoint one or more of our principal serjeant surgeons, or the surgeon-general of our forces, if not already an examiner or examiners of surgeons of the said College; or otherwise shall choose and appoint out of their own body some other person or persons to be examiner or examiners of surgeons for the same College, in the place and stead of such examiner or examiners as shall have happened to die, or have been removed from the said office of examiner in the then next preceding year, unless such vacancies in the office of master or governor, and in that court, shall have been previously filled up within the then preceding year, which it shall be lawful for the said court of assistants to do, at any special court to be held for that purpose: and also in like manner choose and appoint, out of the members of the said College, established by these presents, some person or persons to be of the court of assistants of the same College, in the place of such person or persons who shall have happened to die in or have been removed from the said office of one of the court of assistants in the then next preceding year; unless such vacancies in that court shall have been previously filled up within the then preceding year; which it shall be lawful for the said court of assistants to do, at a special court to be held for that purpose.

And it is our will and pleasure, that the master or one of the governors, together with ten assistants at the least, shall be at all times sufficient to constitute a court of assistants for the purpose of such elections, or for the purpose of transacting any other business belonging to the said court: but that no court of assistants shall be holden for the special purpose of electing any person to be master, governor, examiner, or assistant, without seven days previous notice to be given for that purpose, by summons to the members of the court of assistants for the time being.

And

And furthermore it is our will and pleasure, that if at any time or times hereafter it shall happen that the master and both the governors of the said College hereby established, shall die, or become incapable of acting, before the election of a new master and governors, according to the provisions hereinbefore contained, that then, and in every such case, it shall and may be lawful for the senior member of the court of assistants, who shall be capable of attending, to summon, convene, and hold a court of assistants, which shall be held as soon as may be next after the death or incapacity of the last of such of them the said master and governors, who shall be so dead or incapable of acting; and that at such court a master and governors of the said College shall be elected for the remainder of the then current year; and that it shall and may be lawful for the senior assistant of the said College who shall be then present, to preside at and hold such court, and to administer to the new master and governors, who shall be then and there elected, the oath appointed to be taken by the master and governors of the said College as aforesaid, any thing herein contained to the contrary thereof notwithstanding. And in case it shall so happen that on the day appointed for the ordinary election of master and governors for the ensuing year, the master and both the governors shall be dead, or incapable of attending, the senior member of the court of assistants who shall be present at the court of assistants to be held for the purpose of such election, shall preside at and hold such court, and administer to the new master and governors, who shall then and there be elected, the oath appointed to be taken by the master and governors of the said College as aforesaid, any thing herein contained to the contrary notwithstanding. And in case it shall at any time happen, that the persons who shall assemble at the day and place appointed for any court of assistants to be holden in pursuance of these our letters patent, shall not be capable of holding such court, by reason of the absence of any of the members of the said court whose presence

shall be required for that purpose, it shall be lawful for the senior member present to adjourn such court to a future day, provided that no such adjournment shall be made until after the expiration of one hour at the least, from the hour appointed for holding such court.

And it is our further will and pleasure, that after the day of the date of these presents, no person, except those who before the day of the date of these presents were members of the late Corporation of Surgeons, established by the said act, made and passed in the eighteenth year of the reign of our royal grandfather, King George II. and also excepting such persons as shall have received such letters testimonial as aforesaid, under a seal purporting to be the seal of the late dissolved Company or Corporation of Surgeons, shall be capable of becoming a member of the said College hereby established, unless he shall have obtained letters testimonial of his qualification to practise the art and science of surgery, under the common seal of the College hereby established; but every person who shall hereafter obtain such letters testimonial, under the common seal of the College aforesaid, shall thereby, by virtue of such letters testimonial, become and be constituted a member of the said College, subject to all the regulations, provisions, and bye-laws of the said College.

And it is our further will and pleasure, that from and after such day on which the court of assistants of the College hereby established shall first meet, in the manner before mentioned, the examiners of the College of Surgeons hereby established, shall, and they are hereby required from time to time, upon request to them made by the commander in chief of our forces, and by the lord high admiral, or commissioners for executing the office of lord high admiral, or any other officer of us, our heirs or successors, properly authorized to examine every person who shall be a candidate to be appointed to serve as a surgeon or assistant surgeon in any regiment, troop, company, hospital, or garrison of soldiers, in the service of ourselves,
our

our heirs or successors, or to serve as a surgeon or surgeon's mate, appointed on board any ship or ships in the service of ourselves, our heirs or successors, or any other service in which we, our heirs or successors, shall think fit to employ any persons to act in any such capacities, and shall accept and receive for each such examination, from the persons so examined respectively, such fee or reward as shall from time to time be allowed by such officer or officers of us, our heirs or successors, as shall be authorized to require such examinations, to be had respectively, and no more; and shall also in like manner examine all surgeons' instruments to be used in our service, which they shall be required in like manner to examine, and shall return such instruments, when examined, to such person or persons as shall be appointed to receive the same, with such certificate, in such form, and properly sealed up, or otherwise authenticated in such manner as the officer or officers from time to time to be appointed by us for such purposes, shall require; and taking for the same examination such fee or reward as shall be allowed from time to time by such our officer or officers respectively, and no more.

Provided always, that the fees or rewards from time to time to be appointed as aforesaid, for the examination of any such person or instruments as aforesaid, shall not be less than the fees or rewards heretofore paid for the like examinations respectively.

And further we will, that no court or courts for the examination of any person or persons touching their skill in surgery, shall ever be held but in the presence of the master or one of the governors, and five of the members at least, of the court of examiners of the said College, hereby established and incorporated as aforesaid.

And it is our further will and pleasure, that the members of the said late Corporation and such other persons who, since the dissolution thereof, shall have obtained such letters testimonial under a seal purporting to be the seal of the late dis-

solved Company or Corporation as aforesaid; and who shall be willing to become and be members of the said College hereby established and incorporated, shall testify their acceptance of these our letters patent, and their consent to become members of the said College, by signifying such their acceptance and consent in writing to the court of assistants, within six calendar months after the date of these our letters patent, who shall cause such acceptance and consent to be entered in certain books to be kept for that purpose at the hall or council-house of the said College; and the said court of assistants are hereby required to keep such books, and have such entries made therein accordingly.

And it is our further will and pleasure, that such and so many of the members of the said late Corporation, and of such persons as shall have obtained such letters testimonial as aforesaid, as shall not, within the time aforesaid, signify in manner aforesaid their acceptance of these our letters patent, shall not be deemed or be members of the said College, unless they shall be duly admitted to be members thereof by the said court of assistants, upon special application made to them for that purpose.

Provided always, that if any of such persons shall happen to be beyond the seas at the date of these our letters patent, it shall be lawful for such persons respectively to signify their acceptance thereof, in manner aforesaid, within six calendar months after they shall return respectively to this kingdom.

Nevertheless it is our will and pleasure, that the master, governors, and assistants of the College hereby established, and hereinbefore specially named and appointed, shall and may proceed to hold a court for the purpose of carrying these our letters patent into execution, as aforesaid, without having testified their assent to and acceptance of such letters patent, by any writing, or by any entry to be made in manner aforesaid.

Witness

Witness his Majesty, at Westminster, the 22d day of March, in the fortieth year of his reign.

By writ of privy seal,

WILMOT.

Art. 18. *Further Information respecting the Case of Mrs. Craib, formerly announced as cured of a Cancer in both Breasts by Dr. Nisbet. With additional Cases.* Communicated by Mr. OLIPHANT.

To the Editors of the London Medical Review and Magazine.

GENTLEMEN,

IN the last Number of your Review and Magazine, there appears a "Reply to Mr. Oliphant's Account of Mrs. Craib's Case of Cancer," wherein it is stated, that my Communication was "clearly meant to imply a reflection on the former relation;" whereas my motive, I solemnly declare, was what I thought due to myself and the public on this occasion, viz. solely to give a faithful detail of the case of Mrs. Craib; which I did, and sincerely console myself in so doing, for reasons hereafter mentioned.

I cannot help observing, in order to lessen the dependance on my authenticity, and to draw aside the public's notice from my report of the case, so essentially different from his, that much ingenuity has been employed by Dr. Nisbet to serve his purpose: this with those who know me will weigh nothing, and will weigh just as much with others when they are acquainted with the sequel.

The gentlemen advertised in his first communication had very little to do with the detail of Mrs. Craib's case; therefore I considered particular notice was irrelevant in my report; only two prescribed, the rest merely looked at it; they did not all give an opinion: yet an effort has been made to degrade their professional abilities before the public, under this specious pretence,

pretence, merely to give them "an opportunity of proving the authenticity of the statement;" which, I believe, they did not give themselves the trouble to do; whereas, in fact, it was to enrich his own triumph and influence in the public opinion. When there were collected together, by private invitation, several other gentlemen of the profession, to dandle this abortive unique, surely the like gentle mode might have been extended to the other respectable surgeons, if a simple opportunity had been alone in contemplation: no, it could not here be so intended, though

"Inter se convenit ursis."

My intention being a detail of facts, not controversy about imaginary points, however wished for, in the relative description of diseased appearances, the most essential difference will be seen: no reverted edges, no pouring out of quantities of blood; no rheumatic or erratic pains, except a few hours of pain from very hard labour; no violent pain in the breast, or large ulcer, ever happened: there were some alarming chronic inflammations in the miliary glands of the skin, and a red sublivid hue of the whole breast: the last was the consequence of accident and empirical treatment.

I did not object to the frictions, in the first instance: being responsible for a safe conduct of treatment, when my patient was listless and greatly reduced, with loss of appetite, and a sore mouth, in extremely hot weather, not favourable to the regaining of lost strength, by her solicitation, and my own opinion, I desired that the severe discipline might be laid aside. There was no shrinking of the breast perceptible, but what was in common to the rest of the body, except as far as arose from an extension of the ulcerations, till after the pleuritic attack.

The resolution of the upper and larger part of the diseased breast into matter, was often said to be at hand, and in an actual state of suppuration, though it never happened; though felt, it was never seen.

Of the primary cause of absorption of the breast, and the altered

tered condition of the ulcerations, I have given an opinion in my statement; wherein I neither took the merit of a cure to myself, nor allowed it to the Doctor: though I admitted the breast was absorbed, and the ulcers healed, yet a constitutional diseased irritation subsisted from this absorption.

If it is meant, by the "impropriety of the application," (pronounced, I am sure, by no oracle in physic,) that my treatment of the patient in the latter week of October was improper, when I considered it useless to consult him, I must say, (by the violent interposition of Dr. Nisbet, who, unsolicited, called in another physician to give weight, and carry the patient by a coup de main,) a decoction of angustura bark, with vitriolic acid, was prescribed by him; and though the practice was irregular, I made up this medicine, having alone a wish to benefit the patient, and to convince her that she should have all the assistance suggested for relief: I gave her, however, my opinion, on administering the first dose. By this treatment a stop was put to the plentiful glary expectoration; a most teasing cough came on; tightness and oppression across the chest, with short breath; so that I had the greatest difficulty to persuade her to repeat the dose, and only on the assurance that she should have a large delaxant portion of ipecacuanha, with opium, and some volatile alkali, to provide against serious consequences, should they ensue: a second portion was given, but might have proved fatal, (according to the account of her friends who attended, and Mrs. Craib herself, the following morning,) if she had not taken the provided medicine. Though the Doctor supposed he had cured the cancer, he pushed further here in the province of medicine.

Did I treat my cases "with bark and carbonic acid?" Has Dr. Nisbet compiled so much, and yet in a trifling statement is capable of making such a mistake? This error is of itself suspicious. However, I should not be surprised to find the greatest enemy to bark in detail employ it in practice, and without restriction: such to me seems to be the case with opium.

I must

I must take notice also, that the reflector on Mrs. Osborn's case has paid less attention to the circumstances of it, than to his own reveries: the skin was puckered before inflammation, suppuration, or sloughing; but after sloughing, the reserved skin extended smoothly over the formerly ulcerated surface, not healing as a scrofulous sore, the appearance of which every tyro, nay, every old woman, is acquainted with.

As to making a comparison between the influence of sudden inanition and starvation, in removing morbid accumulation by absorption, it is only an interlude.

It is true, Dr. Nisbet asked me, if I had any objection to his giving Mrs. Craib's case to some periodical publication; and I said, none. When he had written it, he waited on me in his way to the receiver of communications, and read it over. To the best of my recollection, nothing particular passed, except at our parting from my house, wherein I told him, his account, with regard to my opinion given to Mrs. Craib, when I first saw her, was not true; and a proof of this he could have from herself. My opinion was, that I gave her hopes of a sloughing of the whole diseased breast, not "by absorption," as was afterwards inserted; and also an improbability of any of it being restored to health. Before he read me his account, as in the other reports of opinions, it was represented, in the most unqualified pronounciation, to be incurable, and that he of himself had performed a perfect cure. Whether he would have made any alteration from what I said, I knew not: indeed it was of no consequence.

Mr. Coe, Mrs. Craib's friend, and Dr. Nisbet's operator, a worthy man, though in a humble station of life, called upon me the same evening; and it was mentioned to him what his acquaintance Dr. Nisbet intended: the manner and precipitancy of which I disapproved of. He said he would go to the Doctor, as it struck him in the same way; and would talk to him about it. He called again, and told me the Doctor replied, "he would stop its publication."

What right has any one to judge of another professional man's sentiments, who had not himself pursued "the candid line of conduct," and had broken off all communion by his empirical conduct, and reduced himself below the level of a regular practitioner's notice?

With regard to joint names, was it likely I would make myself responsible for any thing Dr. Nisbet might have chosen to insert? for, in fact, I had not even the reading of it; yet I was to bear its fate for the Doctor's sake. This is a *fac simile* to his declaring, in a note to Dr. Bradley, that leave was given, by gentlemen who had seen the case, to attest the cure by the use of their names: whereas, in truth, Mr. BLAIR, one of them, did afterwards publish a gentle rebuke and refutation of such a tender on his part. *Med. and Phys. Journ.* N° 22, p. 569.

As far as hitherto concerns our statement of Mrs. Craib's case to the public, the patient herself had read both; and was asked, in Mr. BLAIR's presence, her opinion with regard to their justness: her answer was, "If she had not been told Dr. Nisbet's statement was that of her disorder, she should not have thought it; but that, as far as she could judge, or knew, Mr. Oliphant's account was just."

My statement in the London Medical Review and Magazine for December, so far from advancing that I had cured the patient, according to Dr. Nisbet's attack, will be found to contain these words: "However, subsisting still is a *scirrhus* in the right breast, which seems to enlarge with her repletion; and there is not the least doubt of morbid irritation existing in her habit, most likely the offspring of her absorbed diseased breasts, or that disposition which produces *scirrhus*."

I am sorry my opinion has been realized. On the 1st of this month she sent for me, to shew me a few eruptions that had come out the preceding fortnight; and with considerable relief to her inside, she told me. When I saw her, I found there were innumerable affections of the miliary glands

of the skin of both breasts, particularly under the absorbed one, extending a great way on the side under the arm. The last healed sore, where the absorbed one was, was reopened; on several other parts of this surface considerable scirrhus tubercles have arisen. The right breast, from being left with a small pendulous scirrhus, sustained by the flaccid integuments, has now the skin contracted, which draws up the increased scirrhus; and the whole threatens to become one mass of disease, of much more serious consideration to Mrs. Craib than any former state of her malady that I have witnessed: as also her present weakness, indifferent appetite, bad digestion, a disposition to anasarca, and her pulse upwards of 112, have disabled the constitution from sustaining such a grievous load for any great length of time.

Lest this farther account of my patient's case should be called in question, from sinister motives, as had already happened, I requested Mr. Blair to see the state of Mrs. Craib's health on the 8th instant; which he politely and obligingly did, and favoured me with his report of what he saw, as follows:

A Letter from Mr. BLAIR to Mr. OLIPHANT.

“SIR,

“AS you have done me the honour to give me a sight of Mrs. Craib's case, I cannot reasonably decline writing (as you desire) a short statement of what I then witnessed.

“When I formerly saw the patient with Dr. Nisbet, appearances seemed very much in her favour, and there was even room to hope for a complete cure; but, yesterday, I observed the glandular enlargement and induration of the right breast had increased, the skin and integuments of the left side were irregular, tuberculated, and adhering to the pectoral muscle; besides which there were various hardened subcutaneous glands about the left breast, extending towards the armpit.

“I here beg leave to conclude my evidence. If it will serve

serve to throw light on the truth, you are welcome to make use of this letter.

“ I remain, Sir,

“ Your obedient humble servant,

Great Russel Street,

“ WILLIAM BLAIR.”

Bloomsbury. Jan. 9, 1801.

The following two cases, which I am afraid will be followed by several others, will further afford a reasonable justification for my giving the fair statement of Mrs. Craib's case, that has deprived these patients of the only chance of cure.

In February last Charlotte Logan, at Mr. Campbell's, Newcastle Street, Strand, aged 46, had her menstrua suddenly suppressed by a violent emotion of the mind; and in the summer perceived a small scirrhus in her left breast, which became painful in August following.

About September 25th she was attacked with fever, said by the gentlemen who attended her, to be independent of the condition of the breast; but on the incumbent skin of it, and to a great extent on the left side, a diffused redness appeared, attended with much pain, which was removed by repeated bleedings with leeches, and left the scirrhus in the same condition as before.

From the alarming state of the breast, she was advised to go into St. Bartholomew's Hospital, wherein she remained nearly a fortnight. After a consultation of the surgeons, excision of the diseased part was concluded on: hearing, however, of Dr. Nisbet's cure of Mrs. Craib in the beginning of October, her friends removed her suddenly to be under his care, who pronounced “ he would cure her, at farthest, in six weeks.”

On the seventh week, it was said that the breast would suppurate and burst in eight days. But a few more days were passed; and suppuration did not follow.

After being nine weeks under his frictions, she was taken with a violent pain in her head, when she was desired to keep her bed. For a fortnight she was confined; the Doctor only

saw her once, and never after returned, for reasons best known to himself, having attended her eleven weeks. There was great increase of the pain and disease in the breast, and an oozing from around the nipple, forming troublesome incrustations.

A week after this she applied to me, and I found the whole left breast scirrhus, several cuticular glands inflamed, which appeared first under the Doctor's care, and an incrustation round the nipple; the whole attended with most excruciating pain, and vast agitation of mind. She now wanted me to pronounce whether it could possibly be cured: not being bold enough to satisfy her wishes, she was put upon a plan that was considered as too expensive in the purchase of malt. Though the application soothed the breast, yet I did not see her after, till I met her on the 1st instant at Mrs. Craib's for the second time, and found she had an ointment spread on paper: I therefore conclude she is now under the direction of some old woman. During this interval several lymphatic glands behind the clavicle, and up the side of her neck, have become enlarged.

There is also the case of Mrs. —, who put herself under the care of Dr. Nisbet, in consequence of the first publication of Mrs. Craib's case; but the result of that can be "best related by the undertaker."

I have now, Gentlemen, laid before you and the public all the facts deserving their notice respecting Mrs. Craib's case. It was very much hoped for, that personality might have been avoided: however, unfortunately a spirit has shewn itself, living and thriving on controversy, that has dragged me into measures I highly dislike, and I must, in future, leave it to itself; a spirit which substitutes sophistry for plain facts, dishonourable insinuation for claim of rectitude, and scholastic reasoning for practical opinion.

I am, Gentlemen,

Percy Street,

Your most humble servant,

Jan. 18, 1801.

ISAAC OLIPHANT.

Art.

Art. 19. *Account of a new and safe Method of Cure in the Disease known by the Name of Tetanus Traumaticus, confirmed by two remarkable Cases, and accompanied with various Observations.* By Dr. W. A. STUETZ, of Schwæbisch-Gmuend.

THERE are few morbid affections of the human body which so frequently baffle all the skill of the most experienced medical practitioners, as the disease known in nosology by the name of tetanus traumaticus. This observation is confirmed by the experience of physicians in all ages; and we may safely assert, that amongst a hundred persons who have been attacked with this disease, scarcely ten have escaped with their lives. Some cases are however related, in which a successful cure has been effected; but in these such a variety of different medicines has been used, that it is impossible to determine to which particular remedy, or mode of treatment, the fortunate event ought to be attributed. A *modus medendi*, therefore, which in all cases of this disease not unavoidably fatal, might be employed with safety, and a rational hope of success, was hitherto to be considered as a desideratum in medicine.

The tetanus, as well as its precursor the trismus, arises most frequently in consequence of wounds; though it has not as yet been determined with certainty what particular conditions are requisite in order to render a wound capable of producing this disease. The proximate cause of tetanus is enveloped in equal obscurity, and the light which anatomy has attempted to throw upon the subject is insufficient. The author defers communicating his own private opinion till it shall have been confirmed by further observations. His present intention is merely to make known an entirely new method of treating the disease, which in two cases, one of which was of the most remarkable kind, was attended with complete success. The history of these cases is as follows:

In the middle of the month of September last, the Imperial field-hospital was removed to this place (Schwæbisch Gmuend.)

After

After the Imperial troops had stormed the intrenchments at Mannheim, on the 18th of the same month, several transports of wounded soldiers were brought, during the course of the following week, into the hospital. Amongst an immense variety of gun-shot wounds of different kinds, there were also some accompanied with tetanus. All those who were attacked in this manner died (with the exception of one, upon whom the new method was tried,) in spite of all the exertions of their medical attendants, who employed every remedy that seemed likely to procure relief; as the following case, communicated to me by Mr. Chromy, physician to the staff, who had the principal care of the patients from the time of their admission into the hospital, sufficiently evinces.

Case 1. Jucka Stojanow, a private foot soldier, 25 years of age, and of a healthy constitution, was wounded at Mannheim Sept. 18, 1799, by a musket-ball, in the upper part of the right foot, near the ankle; and was brought, Sept. 26, into the field-hospital. Upon examining his wound, the ball appeared to have passed entirely through the foot; the channel of the shot went from the left to the right side, under the extensor proprius pollicis et communis, slanting a little downwards, but in such a manner that the two apertures of the wound were not more than two inches distant from each other. The tendons did not appear to be injured. The patient could rest his body upon a part of the wounded foot, and was taken care of amongst the slightly wounded persons. Sept. 30, he complained of a sense of tension in the right side of the neck, of a degree of stiffness in his jaws, and some difficulty in swallowing. As soon as these symptoms were discovered, he was ordered to take an infusion of two drachms of rad. yalerian in six ounces of water, with half a drachm of tinct. anodyn. in small and repeated doses. Externally, a mixture of equal parts of tinct. anodyn. and linseed oil was rubbed into the contracted side of the neck, and an emollient poultice was applied to the wound. On the following day the symptoms

toms were as before, only that the patient complained of some anxiety and want of sleep. Besides continuing the external application of opium, half a drachm more of the tinct. anodyn. was added to the mixture. On the 2d and 3d of October the patient sweated a little; but neither sleep, nor any remission of the spastic symptoms, supervened. The medicines were continued.

On the 4th, besides the contraction of the right side of the neck, and the stiffness of the jaws, the whole right leg, and the muscles of the thorax and abdomen on the same side, were seized with spasms. An incision was made into the part between the two orifices of the wound, and both the above-mentioned tendons were cut through, as it was conceived that some injury sustained by them might possibly have given rise to the tetanic symptoms. The wound was externally dressed with tinct. anodyn. and olive-oil in equal parts; the frictions in the neck, and the poultice to the wound, were continued; and internally the patient received the above-mentioned mixture, with an addition of half a drachm of tinct. anodyn.: consequently, in twenty-fours, he took a drachm and a half of tinct. anodyn. independent of what was conveyed into his body by means of the external applications. All this, however, produced no alleviation of the symptoms; but, on the contrary, they grew worse and worse, till, on the 5th, the spasms were extended to the whole body, in the form of an opisthotonos. All the muscles of the belly were stretched as tight as a drum; the whole body was rigid and bent backwards; and the jaws were so firmly locked, that it was not without the greatest difficulty that a small quantity of liquid could be introduced into the mouth of the patient. He could not bend his head forwards by any voluntary exertions; he lay in continual convulsions of particular parts and members of his body; his skin was constantly covered with a cold exhausting sweat; his anxiety great; and his whole condition miserable in the extreme. His pulse was small and feeble,

his

his thirst was excessive, his features distorted, and, in a short time, he became entirely emaciated. A powder, consisting of musk and opium, was now administered in such doses, that he took of each twelve grains in the space of twenty-four hours; besides which, two drachms of tinct. anodyn. were mixed with his drink, which consisted of a decoction of barley with wine. October 6th and 7th, the same remedies were continued, and the wound began to discharge a serous pus. On the 8th, as the symptoms did not abate, nine doses, consisting of two grains of musk, and three of opium each, were administered in the space of twenty-four hours. Injections with tinct. anodyn. were also administered, and emollient poultices and frictions with tinct. anodyn. and olive-oil were alternately applied to the abdomen.

On the 9th, as neither sleep, nor any abatement of the symptoms, was produced, thirty-six grains of opium were administered within the twenty-four hours, in doses of two grains each; besides which, the admixture of tinct. anodyn. with his drink, and its external application, were continued. Both into the wounded leg, and into the neck, upwards of an ounce of mercurial ointment was rubbed daily; the dressings applied to the wound were also smeared with it. This mode of treatment was continued till the 16th of October, without salivation being produced, or any abatement of the symptoms, which now had attained the utmost degree of violence. The patient lay in a state of extreme exhaustion; the sweats were constant, cold, and colliquative; the pulse extremely small, so that it could scarcely be felt; the face had quite the Hippocratic aspect, and all the prognostics of impending and certain death were present.

As I frequently visited the hospital, my attention and commiseration were strongly excited by the state of this patient. It happened that during this period I perused the second volume of Humboldt's admirable work, *On the Excitability of the muscular and nervous Fibre*. When I read the ingenious experiments

experiments of the author, in which he excited galvanic actions in nerves and muscles by touching them with various chemical substances, (Vid. Vol. II. Sect. 14.) those in which he alternately applied alkalies and opium to nerves particularly struck my attention; and the idea started into my mind, that a combination of alkalies with opium might possibly produce beneficial effects in tetanus. By comparing with these the similar experiments of Michaelis, (See Gren's New Physical Journal, Vol. IV. N^o 25,) I was still more confirmed in my opinion. After mature consideration of the subject, I thought there was reason to expect the greatest advantage from the alternate use of alkalies and opium in tetanus; and though, in the experiments of Messrs. Humboldt and Michaelis, these substances had been applied in a direct manner to the nerves, which were laid bare, and only defended by their sheaths, yet I did not consider this as a sufficient objection; for when I reflected, that by internal exhibition the alkali and opium might be made to act upon an organ possessed of such sensibility, and provided with such an abundance of nerves, as the stomach, no doubt remained in my mind of the success with which the employment of these remedies would be attended. I therefore communicated my idea to Drs. Metzler and Chromy: the first of these gentlemen assured me, that he had never been able to cure any one of his patients who laboured under a complete tetanus, although he employed every remedy he could think of. I proposed to them to try the alkalies in combination with opium; and as this was already a desperate case, they complied. It is necessary here to remark, that in order to justify our hopes of a successful event, we ought to operate as extensively as possible upon the nervous system, as the seat of the disease, and consequently apply the remedy to as many of the terminations of the nerves as possible. For this purpose, I thought it best to employ, in the first place, a warm bath strongly impregnated with alkali; as in this manner it would probably act most quickly and easily upon the in-

numerable nervous extremities on the surface of the body, from whence the stimulus might be propagated throughout the whole nervous system. Should this take place, and the torpid nervous system be again excited into action, the alkali, in combination with opium, might then be applied internally to the nerves of the stomach, and the revived nervous excitability further kept up by appropriate stimuli. Whether I argued justly, and whether my plan of cure was conformable to nature and the actual state of the patient, the reader will be enabled to judge from the following continuation of the history of this disease to its final termination.

October 17th, the patient, who already was in an almost lifeless state, was placed in a warm bath, consisting of the common ley made with the ashes of wood, in which two ounces of lapis causticus were dissolved. In this bath the bandages upon the wound were thoroughly soaked through, so that the wound itself came into actual contact with the alkaline liquid. Scarcely had the patient been placed in the bath, when life and motion seemed at once to return; his limbs, which before were quite rigid, he could now move with ease; he could bend his head both forwards and backwards; the spastic state of the jaws was perceptibly diminished, and he shewed evident signs of pleasure whilst he remained in the bath. After he had been lifted out, and laid again upon his bed, the spasmodic symptoms became somewhat more violent, though they were far from rising to the same pitch as before. The alkali in combination with opium was now administered internally in the following manner. A drachm of purified vegetable alkali was dissolved in six ounces of distilled water, with the addition of half an ounce of syrup, and this solution he was directed to receive in six doses, at intervals of two hours; at the same time the thirty-six grains of opium were reduced to ten grains within the twenty-four hours. During the internal exhibition of the alkali, the general spastic state of the body diminished perceptibly, only clonic

clonic spasms now and then convulsed the lower extremities ; the patient frequently fell into a short, refreshing sleep ; the rigidity of the jaws abated considerably ; and the face, which shortly before had exhibited all the features of approaching death, resumed its animation and colour. (The mercurial frictions, which had been continued for the space of a week, down to the 18th, without producing any beneficial effect, were now entirely omitted.) The cold clammy sweats disappeared ; instead of which a warm liquid perspiration broke out over the whole body, which was so constant and profuse, as immediately to wet through the patient's shirt as often as it was changed. The diet of the patient consisted of barley-broth with wine, and his drink was barley-water, likewise with wine. An emollient injection was administered daily, and always produced a scanty discharge of hard fæces. Every other day the alkaline bath was repeated. This mode of treatment was continued for the space of ten days ; the internal daily dose of alkali was always a drachm ; but that of opium was diminished one grain every day, till at length the patient took only two grains in the twenty-four hours, which were always administered in the evening. Under this course the spastic rigidity of the jaws decreased sensibly from day to day ; the convulsions of the lower extremities abated both in frequency and violence ; the warm sweats continued, and the patient enjoyed refreshing sleep for several hours.

On the 27th the internal administration of alkali was increased to four scruples, and on the following day the same quantity was given, the rest of the treatment being the same as before. On the 29th, as the spasms had again considerably abated, though they did not entirely cease, the internal exhibition of alkali was augmented to one drachm and a half ; but only one grain of opium was administered daily, and that in the evening. The injections were omitted, and the bath repeated only once in three days. As the patient's appetite began to return, he received, besides the barley-broth

with wine, a quantity of solid food, with a pint of wine for his drink. On this day the convalescent was removed out of the sick-ward into a separate chamber well heated and aired. On the 31st he could open his jaws freely; the spasms of the muscles had entirely ceased, with the exception of a slight rigidity of those of the abdomen; he had completely recovered the voluntary motion of all his limbs; he could rise out of his bed, and even support himself on his legs. He sleeps sound; his appetite for food is extremely vigorous; and his wound, which has hitherto been dressed with the camphorated digestive ointment, is nearly healed up.

Thus far is the history of this case, as communicated to me by Dr. Chromy, to which I have only made a few additions, having myself witnessed the daily progress of the cure. From the 1st of November, the patient being in a state of complete convalescence, the dose of alkali was gradually diminished, and at length entirely omitted; instead of which he received a decoction of bark with tincture of cinnamon, as a corroborant. With a view to the removal of the local debility, camphorated spirit of wine with laudanum was rubbed upon the spine and abdomen. At the time when I write this, the man is in uncommonly good health; he walks about the whole hospital with the assistance of a crutch, which he is obliged to use on account of the tendons of his foot having been divided; and from his former state of extreme emaciation, he is rapidly recovering his flesh and strength under the influence of a good and nourishing diet. He expresses the most heartfelt gratitude towards his physicians, who, as he is sensible, have snatched him from the very brink of the grave.

During the progress of this case, when it already began to assume a more favourable aspect, another opportunity presented itself for making trial of this new method of cure.

Case 2. Maximo Milo, a private soldier in the Imperial army, was wounded October 16th, 1799, by a musket-ball, on the outer side of the right arm, and on the 21st of the same

same month he was brought into our hospital. On examining the wound, the course which the ball had taken appeared to be the following: It had entered half an inch above the external condyle of the humerus, under the tendon of the biceps muscle, penetrating obliquely inwards and upwards, as far as the middle of the body of that muscle, where it again passed out of the skin. When the patient was brought into the hospital, his arm was swollen and very painful, the wound being considerably inflamed; but these symptoms were removed, in the course of a few days, by emollient applications.

On the 29th the patient felt a degree of tension in the right lumbar region; and on the 30th, some stiffness of the jaws, accompanied with a slight rigidity of the muscles of the neck; all which symptoms he, however, concealed from his medical attendants, from a dislike to taking medicines, and fear of an operation. On the 31st, the stiffness of the jaws and muscles of the neck increased, and gradually a complete opisthotonos came on, for which the alkalies were employed both externally and internally. The patient was directed to take a solution of two scruples of the fixed vegetable alkali in six ounces of distilled water, in eight doses, within twenty-four hours; and was placed in a warm bath, in which two ounces of lapis causticus were dissolved. Immediately on the application of these remedies, the patient found himself better, and the spasms were considerably abated. After the bath he slept for some hours, which he had not done for several days past; but when he awoke, spasms seized his extremities, particularly on the right side. Nov. 1st, the internal exhibition of alkali was increased by one scruple, and in the evening two grains of opium were administered. During the night he slept five hours; but when he awoke, spasms supervened as on the preceding day. At times the whole body became rigid, and the head and shoulders were drawn backwards with extreme pain to the patient. After these symptoms had continued for some time, they always underwent complete remissions; but

but the muscles of the thorax and abdomen remained permanently tense; the spastic state of the jaws increased rapidly; the patient laboured under great anxiety, and his pulse was full and quick. On the 2d, the same treatment was continued without producing any abatement of the symptoms. Mercurial frictions were plentifully applied to the right fore-arm and thigh, and the wound was dressed with the same ointment. On the 3d, the same remedies were continued, with the addition of a scruple of alkali to the solution. The spasms however grew more and more violent. On the 4th, besides the former medicines, the patient took six grains of opium triturated with sugar, in six doses. The mercurial frictions were repeated: but after having been continued for some days without producing any apparent beneficial effect, they were omitted. Besides the six grains of opium which the patient had taken during the course of the day, he received in the evening two powders, each consisting of one grain and a half of opium triturated with sugar, after which he slept half the night through, with a considerable abatement of the symptoms. On the 5th, the alkali given in solution was increased to one drachm and a half; the patient took six powders, each consisting of two grains of opium; the bath was repeated as usual, and an emollient injection applied, which produced three evacuations of hard fæces. The spastic symptoms appeared neither to increase nor diminish under this treatment; but the patient now began to sweat very profusely; his pulse was quick and very full, his thirst excessive, and the rigidity of the jaws was somewhat aggravated. His drink was barley-water, and as food he had buckwheat-broth with wine. On the 6th, the remedies were continued: he sweated profusely, his thirst was excessive, and he was attacked with spasms of the muscles of the thorax, which became so violent as to excite apprehensions of suffocation. On the 7th, the former treatment was still continued, without any apparent abatement of the symptoms. An injection,
consisting

consisting of a solution of soap, consequently also alkaline, was administered, and produced another evacuation of hardened fæces. On the 8th, the alkali given in solution was increased to two drachms, the bath was repeated, and one grain of opium added to the powders. By this augmentation of the medicines, the spasms were somewhat abated, but returned at intervals with their former violence; the sweat continued, without remission, profuse and warm; the thirst was still very great; and there now appeared an inflammatory eruption over the whole body, particularly on the back. On the 9th, the same treatment was continued, excepting that besides the six doses of opium, of three grains each, which the patient took alternately with the alkaline solution, another dose of four grains of opium was administered in the evening. Nov. 10th. The spastic symptoms were considerably abated; thirst and sweat more moderate; and the patient could open his mouth much wider than he had before been able. Medicines the same as yesterday. Nov. 11. Instead of six doses of opium of three grains each, only four doses of four grains each were administered: other remedies as before. Under this treatment all the spasms gradually ceased; the patient could now open his mouth with almost as much ease as when in perfect health, and had the free motion of all his limbs. He also complained to-day for the first time of hunger, he ate a little solid food with good appetite, and his thirst was no longer troublesome. On the 12th, 13th, and 14th, all the former remedies were continued, excepting that the bath was used only every second or third day. On the last of those days an injection of warm soap-water was again administered, and produced an evacuation of hard fæces; after which the tension of the abdominal muscles, which till then had been permanent, underwent a considerable remission. The eruption had gradually disappeared, and the pulse returned to its natural standard. As the patient constantly complained of hunger, he received a larger allowance of strengthening and easily

easily digestible food, with an additional quantity of wine. The alkaline bath was now discontinued. On the 15th, he was attacked with a convulsive trembling in the left thigh and leg; but no alteration was made in his treatment. On the 16th, as not only the trembling continued, but likewise the muscles of the left side of the thorax were seized with a spastic constriction, he was again put into the bath, and one more grain of opium was added to the powders. A mixture of spirit of wine with camphor, and spirit. sal. ammon. caust. was rubbed, three or four times in the course of the day, upon the affected limb and the left side of the thorax.

Nov. 18th. As all the spasmodic symptoms had disappeared, the alkali given in solution was diminished by half a drachm, the patient complaining of the disagreeable taste and burning sensation produced in the throat by the medicine. The opium powders were continued as on the 16th. Nov. 19th, the man feels himself very well, his spasms have ceased, and the wound is healed up. Medicines and diet as yesterday. On the 20th, the patient rose from his bed in good spirits, walked about his chamber, and rejoiced at his recovery. The daily dose of alkali was diminished by half a drachm, and only two of the powders with five grains of opium given in the course of the day. On the 21st, his recovery seemed complete; he expressed great satisfaction in the free and easy motion of all his limbs, and requested to have a larger allowance of food, which was granted him. The alkaline solution, in the proportion of one drachm of the salt to six ounces of water, and the two doses of opium, were repeated this day for the last time. On the 22d, and following days, he rapidly gained strength, he completely recovered the use of his wounded arm; and Dec. 10th he was dismissed from the hospital in perfect health.

These cases, we think, are highly interesting; and will probably lead to a more successful practice, in cases of tetanus, than that which has been generally followed.

Art. 20. *Narrative of the sudden and extraordinary Effects of cancerous Matter, applied to the Tongue, &c.* By Dr. WHITE, Bury St. Edmonds, Suffolk.

To the Editors of the London Medical Review and Magazine.

GENTLEMEN,

IF the following narrative of the sudden and extraordinary effect of cancerous virus should be thought worthy of publication in your Medical Magazine, it is very much at your service.

Bury St. Edmonds,

Dec. 24, 1800.

Yours, with respect,

ROBERT WHITE.

A female relative, at the age of 50 years, perfectly free from every kind of cutaneous and glandular disease, and ever before remarkably active and healthy, inadvertently tasted and swallowed a small portion of the remains of an epithem, composed of bals. Gilead. and mel. rosar.; which had been prescribed for a person terribly afflicted with an eroding ulcerated cancer on the lip, chin, and throat, and was repeatedly applied, by dipping a feather into it and besmearing the diseased part. Immediately after tasting this envenomed mixture, she felt a peculiar pricking and burning sensation on her tongue and fauces; to which frequent washing and gargling with brandy and water, and oxycrate with honey, afforded little relief. Very soon after this unlucky accident her mind became much agitated, from being unguardedly told to what purpose, and in what manner, the epithem had been applied.

Having passed two restless nights without abatement of the irksome sensations, I observed a foul appearance on the tongue and fauces, and a slight ulceration on the left tonsil; which latter, I conceived, might have been occasioned by too frequent repetition of the oxycrate; and a mucilaginous gargle with infus. sem. lini, &c. was ordered in its stead: an opening draught also was given on the third morning, which relieved

the stomach of phlegm, and a small quantity of yellow bile by vomiting, and passed the contents of the bowels rather freely : in the course of the day I touched the ulcerated tonsil two or three times with tinct. benz. c. slightly acidulated with muriatic acid; and an anodyne was given at bedtime. The symptoms still continued, and on the fifth day I perceived a few flat, yellow-headed pustules on the back part of the tongue, and that the ulcer on the tonsil had extended itself with a foul surface : complaint was also made of uneasy sensations in the œsophagus. I then became anxious for further advice, and requested the opinion and assistance of Dr. Hay, who then resided at Yarmouth, and of whose skill and judgment I entertained the highest opinion.

At this time the tongue was covered with a brownish coat, or fur, with a dark broad stripe in the middle and back part of it, unattended with rigor, or any other febrile symptom. The Doctor expressed his fears of both cause and consequence; yet hoped that the symptoms were chiefly occasioned by some predisposing cause in the stomach and bowels. A pill with calomel, camphor, and opium, was given two succeeding nights, and an opening draught on the following morning; the local means were altered, to tinct. rosar. mel. and a few drops of spt. sal. marin. The pricking scalding sensation and foulness of tongue still increased; and in a few days the other tonsil was affected with yellow-headed pustules. The latter gargle excited an increased secretion of saliva, which carried off a part of the viscid slime that lodged about the tongue and fauces : yet symptoms multiplied; the face and submaxillary glands were enlarged; and after giving the pills and opening draught, dec. cort. Per. with elix. vitriol. acid. were ordered, and persevered in about three weeks. At the expiration of the month, a mild mercurial course with pil. mercurial. cum opii q. s.; and decoct. sarsap. was entered upon : a slight ptyalism was produced, and moderately kept up for seven or eight weeks; and at the end of three months the

4

the

the ulcerations were healed; and the sensations in the tongue, fauces, and œsophagus, were removed in a great measure; but the tongue had not recovered its former pure state. A gentle opening draught was now and then administered, and the cortex in substance, with decoct. sarsap. and elix. vitriol. acid. were given on the interval days.

About twelve months after the accident, the lymphatic system gave proofs of being much affected; and a number of indolent tumours could be felt in different parts, more particularly on the legs, thighs, and arms; and before she arrived at her 60th year, the glandular parts of both breasts became indurated; upwards of forty of these swellings visibly protruded the skin; two or three of which were nearly equal in size to a pullet's egg, some others as large as pigeons' eggs. At the first perception of these tumours in the lymphatic system, a second alterative course was carried on a few weeks with calomel and cicuta; but it was more distressing than useful. Former symptoms had often recurred, and were commonly appeased by the calomel pills, opening draught, &c.

Several years after the tumours had been discovered, she was, at times, much afflicted with acute pains in the head, attended with vertigo, and sometimes delirium; which complaints were generally relieved by bleeding, the pills and opening draught, nitrous powders, and blisters occasionally. Two fontanels were opened in the early part of these complaints, and continued for several years. Once, in an attack of this kind, she awoke much alarmed with strabismus and imperfect vision; which, with the rest of the symptoms, were gradually relieved by the former means, and repeated application of leeches to the temples. At other times, she has been attacked with peripneumonic symptoms, which seldom abated without twice bleeding; the blood always remarkably sizey. Latterly, she has had two or three partial attacks of paralysis; since which, œdematous tumour has affected her legs and thighs to great extent, and has more than once gone off rapidly by

copious diarrhœa. She is at this time in the 90th year of her age, and although never afflicted with sickness before that apparently accidental cause, has scarcely had a comfortable existence since; yet she has endured her complaints with great resignation, and surprisingly retains her reasoning faculties.

The tumours and indurated breasts, within the last ten or twelve years, have gradually wasted; and the teguments of the latter, in colour, resemble the darkest mahogany. It may be remarked, that five minutes had scarcely elapsed from tasting the epithem, before she was apprized of its nature, and the manner in which it had been applied to the cancerous lip, &c. One might, therefore, reasonably suppose, that her efforts, by hawking, spitting, and washing, which were redoubled as soon as she received the alarming intelligence, would have freed the parts from any noxious quality. Yet it is natural to conceive, that the tedious locality of the first sensations, the slow but extensive affection of the glandular system, the obstinate resistance to the means employed, and the total and sudden change of the constitution, are sufficient proofs, that a portion of virus was absorbed, and, in process of time, contaminated the whole frame.

Art. 21. *Decisive Proofs that the Method of amputating with a Flap, and of healing by the first Intention, were practised by English Surgeons before the Year 1678.* Communicated by WILLIAM BLAIR, A.M. F.M.S. Member of the Royal College of Surgeons in London, Surgeon of the Lock Hospital and Asylum, and of the Finsbury Dispensary, &c.

To the Editors of the London Medical Review and Magazine.

GENTLEMEN,

IT has been plainly affirmed by a writer of respectability and surgical skill, that “*the doctrine of the adhesion of cut surfaces was but lately understood.*” (See Mr. John Bell’s Discourses on

on Wounds, vol. i. p. 3 and 5, edit. 2d. 1800.) “Thirty years ago,” he says, “surgeons had no settled notions that cut surfaces might be made to adhere; they had no motive for saving the skin; or when they had saved it, they did not know how to apply it to the other cut surfaces, nor how much it might contribute to a speedy cure.” But, for the credit of our predecessors, I hope some few, at least, may be allowed the merit of having practised according to the soundest principles of operative surgery; and of being acquainted with the art of “healing by the first intention,” which Mr. O’Halleran, indeed, supposed to be “merely chimerical, and opposite to the rules of nature.”

It would not be difficult to bring forward proofs from several quarters, that the doctrine as well as the practice of uniting wounds by agglutination, or adhesion, was distinctly taught about a century ago: at present, however, I shall only trouble you with one or two extracts from Dr. SALMON’S *Chirurgie*; and from an octavo volume printed at London in 1679, by Mr. JAMES YONGE, or YOUNG, (the name being spelt both ways.) This author’s work is entitled “*Currus Triumphalis, à Terebinthô*: or an Account of the many admirable Vertues of Oleum Terebinthinæ; more particularly of the good Effects produced by its Application to recent Wounds, especially with respect to the Hemorrhagies of the Veins and Arteries, and the no less pernicious Weepings of the Nerves and Lymphaducts. Wherein also the common Methods and Medicaments used to restrain Hemorrhagies are examined, and divers of them censured: and lastly, a new Way of Amputation, and a speedier convenient Method of curing Stumps than that commonly practised, is, with divers other useful Matters, recommended to the military Chirurgion, in two Letters; the one to his most honoured James Pearse, Esq. Chirurgion to his Royal Highness the Duke of York, and Chirurgion General to his Majesty’s Navy Royal; the other to Mr. Thomas Hobbs, Chirurgion in London. By JAMES YONGE.”

*Copy of a Letter from Mr. YONGE, concerning Mr. LOWDHAM's
Flap Operation.*

“ SIR,

“ I FIND by yours, that you are surprised with the intimation I gave you, of a way of amputating large members, so as to be able to cure them per symphysin in *three weeks*, and without fouling and scaling the bone. It is a paradox that I will now evince to you to be a truth, after I have first taken notice of what you affirm, that there is a necessity of scaling the ends of those bones, left bare after the usual way of dismembering, before the stump can be soundly cured; that you never yet found it otherwise, but that where it hath been attempted, the stumps have apostumated, and the caries come off thereby.

“ Sir, I do assure you, I have been so happy to have seen the contrary, in an amputation made between the cubitus and the carpus; where, though the wound was almost nine weeks in curing, and at sea too, yet the bones never scaled, and the stump remained (to my knowledge many months) without the least tendency to eruption; the person then principally concerned was an old practitioner, and one that had long served in the northern wars: he did assure me, he frequently neglected the scaling of the bone, and healed most of the amputations he made in the army and in Scotland without it. I acquaint you of this for its rarity, not that I ever but once practised it when I made amputations the usual way, and I think it not prudent, because there is no necessity to imitate it in such stumps; for that in curing them we have time enough for the disquamation, which is also achieved without any great trouble; whereas should we neglect it, and find, when the stumps come to be almost cicatrized, (as once I did in designing to imitate the said artist, and which made me resolve for ever to decline it,) that there were necessity of doing it, by reason of a caries then contracted; or but then discovering itself, it is manifest what trouble it would beget, and how
greatly

greatly impede the desiccation: there are those that think they ought to scale all bones that have, though but by a recent wound, been bare; and others I have met with, who, on the other hand, too much slight the caries of bones, pretending they moulder off with the matter: how equally unreasonable and vain both are, I need not discourse to so competent a judge as yourself. Wherefore passing these matters, I shall now entertain you with an account of the manner of this operation I would recommend to you, after I have told you, that it was from a very ingenious brother of ours, Mr. C. Lowdham of Exceter, that I had the first hints thereof.

“ The ligatures and gripe being made after the common manner, you are with your catling, or some long incision-knife, to raise (suppose it the leg) a flap of the membranous flesh covering the muscles of the calf, beginning below the place where you intend to make excision, and raising it thitherward of length enough to cover the stump: having so done, turn it back under the hand of him that gripes; and as soon as you have severed the member, bring this flap of cutaneous flesh over the stump, and fasten it to the edges thereof by four or five strong stitches: having so done, clap a dossil into the inferior part, that one passage may be open, for any blood or matter may lodge between; but of that there seldom occurreth any: then lay on a common defensative, *ex. bole. sang. dracon. mastich, terræ-sigil. &c. cum alb. ovor. & aceto*, and thereto girt it close with your cross bandage, and other compresses after the usual manner: the former, viz. the defensative, not only defends from accidents, as heat, pain, fluxion, &c. but gently constipateth the vessels, thereby contributing to the securing the hæmorrhage, and very considerably assists to the agglutination: the latter, scil. the compress ligature, keeps the flesh snug and close to the ends of the divided vessels, confirms the consolidation, keeps the parts from cavity, and the blood from extravasation, and hinders that deflux of humours which would otherwise destroy the intention of cure.

“ In

“ In this sort of amputation, that manner of compressing the thigh by ligature, or the arm near the shoulder, which I have recommended in the foregoing discourse*, is of excellent use; because thereby you may restrain the descent of the blood, till by your dress and bandage you have so far secured the part as that it can receive no damage thereby.

“ In this way of cure, phlebotomy, julaps, ligature of the extreame parts, if need be, with what else may contemporate the blood, hinder defluxion and maturation, and promotes consolidation, though declaimed against in that discourse, is in this case very useful and necessary.

“ In the succeeding dressings, medicines healing per symphysin are to be used, and amongst them, perhaps, there are none better than that already mentioned, adding some powder of the roots of great comphery thereto; the dossil, if you use any, may be left out the next dressing, or that following it.

* The form and use of the *tourniquet* recommended by our ingenious author is thus described, p. 30: “ Sir, I hope it will not be altogether impertinent, if I here take occasion to recommend to the young practitioner one way of ligature very useful in amputations, especially above the knee; that is to say, a wadd of hard linen cloth, or the like, inside the thigh, a little below the inguen, then passing a towel round the member; knit the ends of it together, and with a battoon, a bedstaff, or the like, twist it till it compress the wadd or boulder so very strait on the crural vessel, that (the circulation being stopped in them) their bleeding, when divided by the excision, shall be scarce large enough to let him see where to apply his restrictives; nor shall the pain of that operation be comparable to what it would be, were not the member nummed by the compress. Yet I would direct him in all constrictions, whether by gripe, narrow ligature, or this we recommend, to slacken it a little before the application of his dress, the better to find by their bleeding where his care and applications are most needful: for want of this necessary caution, poor patients do often lose much blood unknown to the surgeon, it having lain concealed within the encompassing bladder: nor is inartificial ligature, and many thick pledgets and boulders, of less inconveniency and mischief; for that they often imbibe the extravasate blood, concealing many large expenses thereof.”

“ That

“That this method hath cured such a stump in three weeks, is a truth I can vouch by sufficient testimony; and I believe you will not much doubt it when you have perused this, and considered how easy and soon such large consolidation hath been made; for this, though it be no reuniting, but the consolidation of flesh never before united, will yet be nevertheless effected, as is evident in the coalition of hare lips, the aptitude of the fingers, eye-lids, lips, glans, and preputium, and the vagina uteri *, when ulcerate, (of which last Roonhuse giveth us a memorable instance,) to unite; and is also more strangely evident in the stories of Sir K. Digby †, Amb. Pareus ‡, and Taliacotius, concerning supplying lost noses, not only by knitting a part of the homogeneous arm, but of another man’s, to supply the scandalous want of that obvious part, to which the incomparable author of *Hudibras* thus alludeth,

- ‘ So learned Taliacotius from
- ‘ The brawny part of porter’s bum,
- ‘ Cut supplemental noses, which
- ‘ Should last as long as parent breech.
- ‘ But’——

“I must not forget to intimate to you, that this manner of dismembering, &c. is not to be made use of, where the part hath been much inflamed, tumefied from fluxion, or otherwise vexed therewith, nor in members amputated for chronic causes; as cancers, fistulas, &c. or where the body is pockt, or very cachectic, because in such digestion (which would destroy the union) is necessary to rectify and sweeten the mass, which it doth by draining off the miasma of the disease more than ten fontanels can do. It’s also no less unavoidable; for the course of matter that hath that way discharged it self so long, (as in a fistula,) cannot of a sudden be obstructed, without hazard of

* “ 3. Ob. Med. Chyrurg. de clausura uteri, ob. 2.

† “ In page 115 of his Discourse of the Sympathetical Powder.

‡ “ Lib. 23. cap. 22.

a mischievous apostumation : moreover, in such ill habits as those cases either cause or result from, consolidation is difficult, if not impossible to be so suddenly performed, as this manner of cure requireth ; the discrasis of the blood having destroyed or weakened its balsam that it cannot expedite the work, which, if not speedily done, cannot be performed securely and firm ; and in parts inflamed and tumefied by fluxion, or by congestion, it is easy to imagine there must be a discharge of that concrete matter, which cannot be, and yet the wound cured by sympathy.

“ But in most of the amputations made at sea in fight, or on land in battles, or wheresoever acute accidents, such as wounds, recent lacerations require it, it may be done, and that with those advantages of the other way it rivals.

“ First, That it is more speedy ; I mean the cure, not the operation ; for it effects it in at least one third or fourth part of the time that the other method can possibly achieve it ; and of what good use this is, both to the chirurgion and patient, I need not trouble you to mention.

“ Secondly, Here no dysepulotic ulcer can possibly happen, as there frequently doth ; especially to stumps of the legs, when, by the unavoidable prolixity of the cure, such a course of matter hath that way discharged itself, as cannot afterward be restrained without great trouble and difficulty, if at all.

“ Thirdly, Stumps are this way cured without scaling the bone : perhaps there is not much trouble, &c. always prevented thereby, as I have already told you, yet some there is at all times, and at some very much : for instance, when nature is slow in casting off the caries, and the hypersarcosis usually invading stumps about the time of cicatrization, cover the bone before it separate, so that applications cannot be made locally to dispatch it, which many times proves a great remora to the desiccation.

“ Fourthly, Here is no expensive profuence, either of the radical moisture by maturation and fluxion, or of the blood by hæmorrhage,

hæmorrhage, or of the succus nervosus by a synovia, or of the lymphatic liquor by the lacrymation of those vessels; ill consequences usually attending the other method and medicaments.

“ I need not prove it with respect to all these, they being truths too manifest to need it: I shall be particular as to the hæmorrhage, because it may seem a strange assertion, that this way should have any advantage of the other for restraining them.

“ That it hath so will appear to you, if you please to consider how much more likely it is, that the bleeding vessels should be secured, not only from present fluxion, but future hæmorrhage, by the so close adhesion and firm union of flesh to that which is circumjacent to them, and (as may be presumed; de facto,) to the ends of the vessels themselves, than by any of the common methods or medicaments I have examined; for that here the consolidation is so quickly and securely made, by help of the application and ligature*, that the

* The *application* to which our author here alludes; as having the power of consolidating wounds, is hot oil of turpentine. This remedy, he tells us at page 63, “ solely and perfectly healeth punctures and incised wounds by symphysis; and that, maugre its digestive faculty. Now that it may not seem strange, I shall attribute a power consolidative to a digestive medicine. I suggest, first, that consolidation is naturally performed; I mean, that medicines do not actually unite wounds, but by accident, viz. by one way or other preventing or stopping extravasation of the blood and lymph, and resisting the influences of the survening air, both which would hinder union: the one by humecting, the other by corrupting the divided fibres, &c. There being those that spare not to affirm publicly, confidently, and perhaps very rationally, that the great and celebrated cures†, said to be performed by the sympathetic powder and the magnetical unguent, are not beholden to them, but to the less regarded means of keeping the wounds clean and close: so that our medicine, though it do digest, yet by occluding the vessels,

† “ G. Hieron. Velschius. Cent. 11th. ob. Phys. Meditarum. Paracelsus de Vuln. trad. l. c. 14. Mr. Wiseman, page 346.

the divided vessel can no more break out than in cured stumps, where they have not only been stopped by any of those common methods, but covered by the incarnation and cicatrix.

“ It will seem less strange, if you further consider, that after the ligature of an artery, for an aneurism, &c. when the silk rots, or the vessel is fretted asunder thereby, there is nothing but this encompassing flesh that stops it.

“ Adding also hereto, that the flap which is to cover the stump and ends of the bleeding vessels after amputation, being of the membranous flesh, is for the most part fatty, and therefore sometimes called *membrana adiposa*; by which, though it be not so apt for consolidation, it is the more fit for securing the flux, because lying upon the ends of the vessels, the blood endeavouring to issue from them cannot penetrate or strain itself through it, as in all probability it would do in that which were more fibrous and less pingued; the latter of them being impervious, the former full of little interstices: moreover, it is by some allowed* one way of restraining hæmorrhagies to divide the vessel, that his bleeding end retiring among the muscles, their compressure may, by closing him,

(as hath been shewn,) it hinders extravasation, and being gummous, defends from the air, whereby it may be thought as well to consolidate as any other, since it doth as much as they, in preventing and defending from what would hinder it.”

I could here subjoin, as an excellent counterpart to this note, a few remarks from Dr. WM. SALMON'S *Ars Chirurgica*, vol. ii. octavo, 1698, on the doctrine of adhesion, or of uniting wounds by the first intention; wherein he gives the most judicious practical directions, and expressly declares this process “ to be the work of Nature alone:” for “ she is the agent, the chirurgeon only is the assistant, and seldom requires more of us than to bring the lips of the wound close together. As soon as the wound is made, there is a balsam of nature ready at hand for the cure; which balsam is blood, at least the lymphatic or serous part of it.”

See likewise the writings of old *Gale* and *Woodall*, British surgeons.

* “ Galen. *morb. cur.* l. 5. A. *Pareus*, lib. 9. c. 7. Dr. *Read*, Lect. 2.

stop.

stop his bleeding; if there be any reason for that method, and what it presumes, it's very considerable here.

“No less is a more generally allowed method of stopping hæmorrhagies, viz. by incarnation, that is, by covering the mouths of the divided vessels with newly generated flesh: this method of the flap, having as much the advantage thereof, as such flesh whereof it consists is more firm and fit to do it than what is newly generated, which is always soft and spongy.

“Nor is it ridiculous to believe that recent flesh, by some specific quality or manner of performance, stays hæmorrhagies, and that very strangely too; if you believe two notable stories delivered by Felix Platerus in sanguin. excretione, ob. lib. 3; the one of a thief, who, by order of justice, having both hands cut off, had the blood stayed.—‘*Gallum gallinaceum, vivum, interea cultro à podice verus illius sternum scindendo, aperiebat et brachium mutilatum statim post ictum, in hanc aperituram includebat.*’—The other of one that had his finger bitten away by a horse, ‘*Sanguisque fluor multis frustra tentatis non sisteretur,*’ was cured by the same way,—‘*fluorque statim substitit.*’

“But to proceed: Fifthly, The cure is this way performed with less pain and hazard to the patient; the great pain of stumps, the watching, fever, convulsions, syncope; the effect of that pain, especially at sea, where necessaries are wanting, are here prevented, partly from Nature's great complacency, and the delight with which she seems to co-operate with art, in curing per symphysin: I say, it is that wherewith she not only seems pleased, but what of herself (as I have already suggested) she will perform, if the lips of the wound be kept clean, close together, and free from the impressions of the ambient air.

“Partly from her not being put upon the work of digestion, or maturation, which, as I have proved, she never performed without a fever and perturbation.

“And

“ And partly from the nature of the different applications, which are here (as all agglutinatives) anodyne; whereas those cured by the other way, must endure the heat of restrictives and digestives, the fretting of detergents to mundify, and corrosives to erode the funguses, always occurring more or less to stumps.

“ Sixthly, It is much easier and cheaper to the surgeon: the first, because much sooner cured and seldomer dressed; the first in three weeks, the last once a day; the second for the same reason, and because fewer medicines, &c. serve at each dressing: of what advantage the former is to him when many men are wounded, and especially when distant from the ease of an hospital, I leave those to tell you that have tried it, as I have done. The benefit of the latter, considering the scantiness of public allowances, and the great number of men that may at one time be under cure, especially in a Mediterranean voyage, is obvious.

“ Seventhly, Stumps this way healed are not obnoxious to break open again on every slight rub; or knock, as do those healed by the other method; a mischief they can hardly avoid, though they endeavour it with the greatest care and art; whereas this being fenced with a firm skin, is no more incident to it than a man's fingers' ends.

“ Eighthly, A new and commodious sort of artificial leg, having a cavity to which the stump is to be intruded, and on which the weight of the body, on the alternate motion of the legs, must be laid, is here most tolerable and convenient; whereas the other way scarcely admits the laying the due stress on them, by reason of the tenderness of the stump, or its incidency to strip and excoriate.

“ These are all the considerable advantages manifestly acquired by this new way: without doubt use and trial will discover more equal to them, and an abundance of lesser conveniences, which at present occur not to my consideration; these are enough to shew the novelty to be considerable and worthy

worthy of imitation: let them have with you this accessional manifestation, that I am very ready to obey and serve you.

“*Plymouth, Aug. 3, 1678.*

JAMES YOUNG.”

As it has long been a general opinion among surgeons, that *Ambrose Paré* was the first who employed and recommended ligatures for the suppression of arterial hæmorrhages, I shall take an opportunity of laying before your readers the most satisfactory evidence of that practice having been common among the ancient Greeks and Arabians; from whom, I suspect, even *Paré* himself borrowed the original hint, and improved upon it.

I remain, Gentlemen,

Your obedient humble servant,

Great Russel Street,

WILLIAM BLAIR.

Bloomsbury. Jan. 20, 1801.

Art. 22. *Announcement of Mr. MACARTNEY's Lectures on Comparative Anatomy, &c.*

IN addition to the spring courses of lectures announced in our last Number, we are requested to mention that Mr. MACARTNEY intends to deliver a Course of Lectures upon Comparative Anatomy, at St. Bartholomew's Hospital; which will begin the 19th instant, and continue until the beginning of May. In these Lectures it is proposed to explain, by recent dissections and preparations, the Anatomy of Animals in general, as far as it is at present known; and also to deduce from thence the fundamental principles of Physiology.

Art. 23. *Monthly Catalogue of new and intended Publications.*

1. DISSERTATIONS on Inflammation. By JOHN BURNS, Surgeon in Glasgow. Two volumes, Octavo. Longman and Rees, London. 1800.

2. The

2. The Clinical Pharmacopœia ; or, General Principles of Practice and Prescription ; arranged under three Heads ; of Materia Medica, Classification, and extemporaneous Formulæ. Being the Principles and most approved Forms of Practice in Medicine, Surgery, Midwifery, and Children's Diseases. Intended as a Compend, or Pocket-book, for medical Practitioners. By WILLIAM NISBET, M.D. Fellow of the Royal College of Surgeons of Edinburgh, one of the Surgeons to the Royal Infirmary ; now of London. Duodecimo. 377 pages. London, Johnson. 1800.

3. Remarks on the Situation of the Poor in the Metropolis, as contributing to the Progress of contagious Diseases ; with a Plan for the Institution of Houses of Recovery for Persons infected by Fever. Published by the Desire, and at the Expense, of the Society for bettering the Condition of the Poor. Octavo. 47 pages. London, Hatchard. 1801. Price 1s.

4. Engravings of two uterine Polypi. By THOMAS DENMAN, M.D. Folio. London, Callow. 1801.

INTENDED PUBLICATIONS.

5. CUVIER'S Comparative Anatomy is said to be translating into English ; and will probably be published by Mess. Longman and Rees.

6. Subscriptions are received by Mr. PRICE, at the Westminster Library, Panton Square, for the printing of a yearly volume, to be entitled "Annals of Philosophy, Natural History, Chemistry, Literature, Agriculture, the mechanical and fine Arts." The first volume will be completed in a few weeks, Price 10s. 6d. We are informed, that Dr. GARNETT encourages and superintends this undertaking.

7. Mr. BLAIR, assisted by several other respectable Surgeons, has been some time engaged in writing a comprehensive System of medical and operative Surgery, adapted to the present improved practice at the London Hospitals, &c. to be published by Longman and Rees, Paternoster Row.

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END OF THE FIFTH VOLUME.

DIRECTIONS TO THE BINDER.

The Engraving of Professor ARNEMAN's and Mr. TRAMPSEL's Instrument should face page 65.

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